LONG BEACH MEMORIAL MEDICAL CENTER EXPANSION MITIGATION MONITORING PROGRAM

SCH NO. 2004081142

PREPARED FOR:

CITY OF LONG BEACH
DEPARTMENT OF PLANNING AND BUILDING
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The California Environmental Quality Act (CEQA) requires a Lead Agency or Responsible Agency that approves or carries out a project where an Environmental Impact Report has identified significant environmental effects to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment" [Public Resources Code (PRC), Section 21081.6 (a)(1)]. The City of Long Beach is the Lead Agency for the Long Beach Memorial Medical Center Expansion (project) as it has the primary discretionary authority related to the project and land uses. The Office of Statewide Health Development and Planning is a responsible agency in their capacity to review and approve plans and specifications for the Miller Children's Hospital pediatric inpatient tower, an acute care facility. The Department of Toxic Substances Control is a responsible agency in their capacity to review the work plan, health risk assessments, and oversight of any specified remedial action plan required to protect public health and safety.

CEQA [PRC, Section 21081.6 (b)] requires that a Public Agency "shall provide that measures to mitigate or avoid significant effects on the environment are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents that address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design."

Consistent with the requirements of Section 15124 of the State of California Environmental Quality Act (CEQA) Guidelines, this section of the Environmental Impact Report (EIR) describes the Long Beach Memorial Medical Center Expansion (proposed project), including its precise location and boundaries; existing conditions at the proposed project site; a statement of the proposed project objectives; technical, economic, and environmental characteristics; and a statement describing the intended uses of the EIR.

II.1 PROJECT LOCATION

The proposed project is located in the City of Long Beach, County of Los Angeles, California. The Long Beach Memorial Medical Center campus (Campus) is located less than 1 mile south of U.S. Interstate 405 (San Diego Freeway), approximately 1 mile east of U.S. Interstate 710 (Long Beach Freeway), and approximately 1 mile north of State Route 1 (Pacific Coast Highway). The Campus is located approximately 3.5 miles northeast of the Port of Long Beach, approximately 1 mile east of the Los Angeles River, and approximately 1 mile west of the Long Beach Airport.

The Campus is bounded on the north by East Spring Street, on the east by Atlantic Avenue, on the south by Willow Street, and on the west by Long Beach Boulevard. The proposed project addresses master planning for land uses and the development of specific project elements within the approximately 54-acre proposed project site in the Campus. Within the Campus, it is anticipated that approximately 16 acres would be affected by the construction, operation, and maintenance of six proposed project elements in the next 20 years.

The Campus appears on the U.S. Geological Survey (USGS) 7.5-minute series Long Beach, California, topographic quadrangle (within the southwestern portion of the Los Cerritos Land Grant Boundary). The elevation of the Campus ranges from 19 feet above mean sea level to approximately 67 feet above mean sea level.

II.2 EXISTING CONDITIONS

The 54-acre Campus is completely developed and characterized by six general land uses: (1) inpatient medical facilities, (2) outpatient medical facilities, (3) mixed use (including services, retail, residential, and vacant land), (4) utilities, (5) circulation, and (6) parking. A property listing is provided in Table II.2-1, Description of Land Uses on the Property. There are approximately 1,213,945 gross square feet of structures located within the Campus (Table II.2-2, Existing Conditions: Gross Floor Areas). There are two licensed hospitals within the Campus: the Long Beach Memorial Medical Center (LBMMC) and Miller Children's Hospital (MCH). These facilities are centrally located on the Campus, north of 27th Street, east of Long Beach Boulevard, south of Columbia Street, and west of Atlantic Avenue. In addition to inpatient services, outpatient services are provided in structures located north and south of LBMMC and MCH. There is a child care center located north of 27th Street, immediately adjacent to and east of the parking structure. There are a variety of mixed uses located south of 27th Street,

¹ U.S. Geological Survey. Photorevised 1981 (1964). Long Beach, California, 7.5-Minute Series Topographic Quadrangle. (Scale = 1:24,000.) Contact: U.S. Geological Survey National Center, 12201 Sunrise Valley Drive, Reston, VA 20192.

² Marie Campbell, *Personal Communication*, 9 August 2004. Pat Johner, Long Beach Memorial Medical Center, 2801 Atlantic Avenue, Long Beach, CA 90806-1737.

including health-related programming, 72 residential units, and 18 vacant lots. Approximately 1.93 acres are dedicated to circulation within the Campus, not including public right-of-ways. There are a total of 3,452 parking spaces located in 11 locations throughout the Campus, including 259 surplus parking spaces (Table II.2-3, *Existing Parking*).

TABLE II.2-1
DESCRIPTION OF LAND USES ON THE PROPERTY

Address	Description	Owner	Primary Land Use
2652 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2654 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2656 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2658 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2609 Pasadena Avenue	Apartments: 2 stories, 10 units	MHS	Mixed Use
			(Residential)
2611 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2613 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2615 Pasadena Avenue	Apartments: 4 units	MHS	Mixed Use (Residential)
2617 Pasadena Avenue	2 single-family dwellings	MHS	Mixed Use (Residential)
2608-2610 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2618-20-22 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
2624-26 Pasadena Avenue	Land / single-family dwelling	MHS	Mixed Use (Residential)
2630-32 Pasadena Avenue	Land / single-family dwelling	MHS	Mixed Use (Residential)
2640-42 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
527-37 East Willow Street	Land / vacant lot	MHS	Mixed Use
2613 Linden Avenue	Apartments: 2 stories, 9 units	MHS	Mixed Use (Residential)
2627 Linden Avenue	Land / vacant lot	MHS	Mixed Use
2633-35 Linden Avenue	2 single-family dwellings	MHS	Mixed Use (Residential)
2620 Linden Avenue	Apartments: 5 units	MHS	Mixed Use (Residential)
2622-24-26 Linden Avenue	Duplex	MHS	Mixed Use (Residential)
2628 Linden Avenue	Land / vacant lot	MHS	Mixed Use
2630 Linden Avenue	Apartments: 2 stories, 9 units	MHS	Mixed Use (Residential)
2638 Linden Avenue	Apartments: 2 stories, 6 units	MHS	Mixed Use (Residential)
2625 Pasadena Avenue	Research building: 2 stories, 6 lots	MHS	Outpatient
2619-21 Pasadena Avenue	Research building: 2 lots	MHS	Outpatient
2623 Pasadena Avenue	Research building: 1 lot	MHS	Outpatient
2675 Pasadena Avenue	Research building: 1 lot	MHS	Outpatient
2685 Pasadena Avenue	Research building: 1 lot	MHS	Outpatient
2691 Pasadena Avenue	Apartments: Beau Geste,	MHS	Mixed Use
	2 stories, 18 units		(Residential)
2608 Pasadena Avenue	Land / vacant lot	MHS	Mixed Use
500 East 27th Street	Guest Residence	MHS	Mixed Use

TABLE II.2-1 DESCRIPTION OF LAND USES ON THE PROPERTY, Continued

Address	Description	Owner	Primary Land Use
			(Residential)
695 East 27th Street,	Clooney / truck property	MHS	Mixed Use
PM 268-46-47, Lots 1 and 2			
2636, 2638 Elm Avenue	Land / vacant lot	MHS	Mixed Use
2650 Elm Avenue, #301-306	Medical offices (condo)	MHS	Outpatient
2650 Elm Avenue, #307-309	Medical offices (condo)	MHS	Outpatient
2651-2653 Elm Avenue	Land / medical offices	MHS	Outpatient
2685 Elm Avenue	Single-family dwelling	MHS	Mixed Use (Residential)
2690 Elm Avenue	Single-family dwelling	MHS	Mixed Use (Residential)
678 East 28th Street	Storage building: 1 story	MHS	Mixed Use
750 East 29th Street	Genzyme, office building: 1 story	MHS	Outpatient
403 East Columbia Street (Ground Lease)	MRI / lot 38 & ½ vacated lot	MHS	Outpatient
403 East Columbia Street (455 Columbia Street)	Buffums / lots 33–37 & 39–43 / vacated alley	MHS	Outpatient
2680 Long Beach Boulevard	Land / vacant lot	MHS	Mixed use
2684 Long Beach Boulevard	Land / vacant lot	MHS	Mixed use
2690 Long Beach Boulevard	Land / vacant lot	MHS	Mixed use
521 East Columbia Street	Land / E.R. parking lot	MHS	Parking
E.S. Fields, L.B. Heights (Canton Lots)	Land / vacant lots	MHS	Mixed use
300 East Spring Street, P.M. 199-97-98, Lot 1-2, Por. of Lot 2	Land / Buffums parking	MHS	Parking
2085 East Third Street	Transitional rehab	LBMMC	Outpatient
2801 Atlantic Avenue	Hospital Memorial West rehab Outpatient surgery Women's Hospital Miller Children's Hospital Administrative Services Building	LBMMC	Inpatient
2801 Atlantic Avenue	Parking structure: 1,772 spaces	LBMMC	Parking
2801 Atlantic Avenue	Children's parking structure: 150 spaces	LBMMC	Parking
501 East 27th Street	Miller house: 2-story building	LBMMC	Outpatient
2701 Atlantic Avenue	Pain Management: 1-story office building	LBMMC	Outpatient
Parking lot on 27th Street	Parking lot next to 2699 Atlantic Avenue (no data)	LBMMC	Parking

TABLE 11.2-2 EXISTING CONDITIONS: GROSS FLOOR AREAS

Building Number per Existing Building Plan ¹	Building	Gross Floor Areas (Square Foot)
1	Miller Children's Hospital	175,162
2	Long Beach Memorial Medical Center	697,630
3	Administration Building	129,531
4	Memorial West Facility (Rehab) ²	107,622
5	Miller House	25,000
6	Ranch House / WIC Medical Center	12,000
8	Memorial Guest Residence Hotel	12,000
9	Research Building	20,000
17	Buffums Plaza	35,000
	Total	1,213,945

NOTE:

TABLE II.2-3 EXISTING PARKING

	Staff/Employee Spaces	Patient/Visitor Spaces	Doctor Spaces	Total Spaces
Existing Parking Demand				3,193
Existing Parking Supply				3,452
Lot A	675	= '	<u> </u>	675
Lot B		217		217
Lot C	-	74	=	74
Lot D			28*	28
Lot E	85			85
Lot F	3=3	26	60	86
Lot G	3-9	-	87	87
Lot H	—	29		29
Lot I	150	=	-	150
Lot J	1,430	164	==	1,594
Lot K		427		427
Subtotal	2,340	937	175	3,452
Existing Parking Surplus		5		259

NOTE:

¹ Building numbers as shown on diagram. Source: Taylor, July 2004. "Existing Buildings." Contact: Taylor, 2220 University Drive, Newport Beach, CA 92660.

² Gross floor area of the Memorial West Facility includes the Rehab center (31,167 square feet).

^{*} Spaces shared with patients and visitors.

- In the immediate proximity of the MCH, provide a pediatric inpatient tower that would increase capacity for pediatric surgical cases that would satisfy a mandate from the California Department of Health Services to provide seven operating rooms by January 2008. An additional three operating rooms would need to be provided between years 2008 and 2015 to meet anticipated demand through the year 2020.
- In the immediate proximity of the MCH, provide a pediatric inpatient tower that would increase capacity for newborn intensive care services and general pediatric patients. The new pediatric inpatient tower will be sized to accommodate the 10-percent increase in the need for pediatric inpatient treatment of children under the age of 15 between years 2000 and 2003, and the projected additional increase of 1 percent per year through the year 2020. The increase in capacity would require 72 additional beds by the year 2008 and another 92 additional beds between years 2008 and 2015 to meet anticipated demand through the year 2020.
- 8. Consolidate and relocate the diverse pediatric outpatient services, well care, screening, diagnosis, treatment, and monitoring into a single, dedicated building in close proximity to the MCH.
- 9. Within the Campus, provide a building designated for mixed uses to accommodate retail uses, such as a gift shop, florist, and food and beverage service, to serve MCH employees, patients, and visitors.
- Provide adequate access and egress to the Campus from Long Beach Boulevard and Atlantic Avenue.
- 11. Provide adequate infrastructure to support circulation within the Campus.
- 12. Provide sufficient parking capacity to comply with the City of Long Beach parking ordinance.

II.4 PROPOSED PROJECT

The proposed project consists of a 2005 Master Plan that specifies a Master Plan of Land Uses that provides a conceptual framework for the reorganization of the six existing land uses: (1) inpatient medical facilities, (2) outpatient medical facilities, (3) mixed-use facilities, (4) utilities, (5) circulation, and (6) parking. Within this conceptual framework, six proposed project elements could be constructed within the next 5 to 10 years:

- Todd Cancer Institute
- Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building
- Miller Children's Hospital—Pediatric Outpatient Building
- 4. Miller Children's Hospital—Link Building
- 5. Roadway Realignment
- 6. Parking Program

The TCI would facilitate expansion of the Campus by relocating cancer treatment programs currently located within the licensed hospital facility and other diverse locations to a single building dedicated to cancer treatment programs. The comprehensive expansion of the MCH would ultimately consist of three new buildings: the pediatric inpatient tower, the pediatric outpatient building, and the link building. As required by the OSHPD, the MCH pediatric inpatient tower would be supported by a dedicated central plant building connected via an underground utility trench. Memorial Medical Center Drive / Patterson Street would need to be realigned to the south to accommodate the proposed MCH improvements. The combined effects of displaced parking from new construction and additional trips generated through the expanded capacity of the hospital require the provision of additional parking. LBMMC has developed a parking program to provide additional capacity. The parking program requires conversion of mixed-use properties, including demolition of the existing childcare center, demolition of 51 residential units, and development of 12 vacant lots.

The total estimated cost of capital improvements is in excess of \$276 million (Table II.4-1, Estimated Capital Improvement Costs).

TABLE II.4-1
ESTIMATED CAPITAL IMPROVEMENT COSTS

Project Element	Total Cost in Million
Todd Cancer Institute, Phase I	\$34.30
Todd Cancer Institute, Phase II	\$17.30
Miller Children's Hospital—Pediatric Inpatient Tower, Phase I	\$92.00
Miller Children's Hospital—Pediatric Inpatient Tower, Phase II	\$61.30
Utility Trench	\$1.00
Central Plant Building	\$5.00
Miller Children's Hospital—Pediatric Outpatient Building	\$19.00
Miller Children's Hospital—Link Building	\$14.20
Roadway Realignment	\$3.00
Parking Program	
On-site parking (N, P, Q, R, S, and T)	\$5.15
515 spaces at \$10,000 per car space	
1,700 space structure at \$14,000 per car space	\$23.80
TOTAL COST	\$276.05

NOTE:

All costs are at 2004 dollar value.

II.4.1 Master Plan of Land Uses

The proposed Master Plan of Land Uses provides a conceptual framework for the reorganization of the pattern of land uses within the Campus to meet the identified immediate needs and anticipated long-term needs of the Campus and community through the year 2020 (Table II.4.1-1, *Anticipated 2005 Master Plan Projects*). The ability to fulfill this mission requires the establishment of a Long-Range Development Plan for the Campus. The City of Long Beach Zoning Code, Section 21.34.020, requires that all sites zoned as Institutional and having an area greater than 40,000 square feet in the City of Long Beach to submit a Long-Range Development Plan that includes all development of the site and site expansions (within a zone designated as Institutional or under the institution's ownership, whichever is greater) anticipated over the next 20 years. As such, this 2005 Master Plan would

⁴ City of Long Beach. 1982. City of Long Beach Municipal Code (Ord. C-5831 § 1, 1982), Chapter 21. Available at: http://www.longbeach.gov/apps/cityclerk/lbmc/title-21/frame.htm

normally be prepared to address planning needs through the year 2025. However, the City of Long Beach General Plan provides planning and demographic data through the 2020 planning horizon. Therefore, this 2005 Master Plan incorporates considerations from the previously adopted 1999 Master Plan, and provides land use designations, recommended capital improvements, and design guidelines to provide for the orderly and compatible development of the Campus to meet the needs of the community through the 2020 planning horizon, consistent with the City's General Plan.

It is set forth in Section 21.34.020 of the Zoning Code that all future projects must be consistent with the approved Long-Range Development Plan. The proposed land uses are consistent with the existing land use designation (LUD) No. 7 Mixed-Use District in the General Plan and with the Institutional zoning. LBMMC has requested the City to extend the eastern edge of the Planned Development (PD-29) zoning, between Spring Street (on the north) and 29th Street (on the south) to Pasadena Avenue. That land is currently zoned as a Regional Highway (CHW) District. However, the land owned by LBMMC between 27th Street (to the north) and Willow Street (to the south), currently zoned as CHW and as a Community Automobile-Oriented District (CCA), would maintain the existing zoning as it accommodates the proposed uses. In addition to revising the Master Plan of Land Uses and zoning, the 2005 Master Plan provides design guidelines, a landscape plan, and a pedestrian plan to guide the planning and design of six capital improvement projects recommended to meet community needs through the year 2020 planning horizon.

TABLE II.4.1-1
2005 MASTER PLAN ANTICIPATED PROJECTS

Project Title	Total Square Feet / Number of Stories	Anticipated Construction Start Date / Completion Date
TCI Phase I	83,630 / 3 stories	July 2005 / September 2006
TCI Phase II	42,300 / 2 stories	July 2010 / June 2011
MCH pediatric inpatient tower	124,500 / 4 stories	October 2005 / January 2008
Phase I		×
MCH pediatric inpatient tower Phase II	73,500 / 4 stories	January 2012 / June 2013
Utility trench	underground	July 2005 / January 2008
Central plant building	3,500 / 1 story	June 2006 / August 2007
MCH pediatric outpatient	80,000 / 5 stories	October 2005 / May 2007
building		
MCH link building	20,000 / 3 stories	July 2010 / June 2011
Roadway realignment	820 linear-feet	July 2005 / October 2005
Parking program	2,187 parking spaces	July 2005 / December 2007

II.4.2 Todd Cancer Institute

The TCI would be located on the northwestern corner of the Campus, southeast of the intersection of Long Beach Boulevard and Spring Street. The existing land use at this location is an 872-stall surface parking lot. The TCI building would provide comprehensive outpatient cancer services in a single facility designed for the unique requirements of cancer patients and their families. These services are currently provided in approximately 24 distinct locations distributed throughout the Campus and in nearby, leased facilities. The TCI building would also be designed to reinforce a sense of arrival to the northern edge of the Campus. Employees, medical staff, and patients would access the TCI from entry

driveways on Pasadena Avenue. The driveway would be adequately sized to accommodate service of delivery vehicles. Outpatient cancer services would ultimately encompass approximately 125,930 gross square feet of new space constructed in two phases.

Landscaping would be provided along Long Beach Boulevard and Spring Street frontages consistent with City of Long Beach requirements and with the design guidelines for landscaping as contained in the 2005 Master Plan for the Campus. Landscaping within the Campus would be consistent with existing Campus landscaping. A healing garden would be developed adjacent to the TCI on the east side of the building. Amenities and plant selections would be sensitive to the needs of cancer patients.

Phase I of the TCI would provide 83,630 gross square feet in a 54-foot-high, three-story building. The building would be identified by two illuminated building signs reading "Todd Cancer Institute" and by ground-level monument signage. The Phase I portion of the building would require 418 parking spaces. It is anticipated that there would be a maximum of approximately 120 employees working in the building at one time. Phase I of the TCI is proposed to initiate construction in July 2005. Upon completion of Phase I in September 2006, the undeveloped portions of the site would accommodate approximately 701 parking stalls.

Phase II would provide an additional 42,300 gross square feet in a new 33-foot-high, two-story horizontal expansion. The Phase II portion of the building would require 212 parking spaces. Upon completion of Phase II, the undeveloped portions of the site would accommodate approximately 633 parking stalls. It is anticipated that there would be a maximum of approximately 60 additional employees working in the building at one time. Construction of Phase II of the TCI is contingent on the growth of outpatient cancer services, the needs of the Long Beach community, and philanthropy. The likely dates to initiate and complete construction are July 2010 through June 2011.

II.4.3 Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building

The expansion of MCH, through the addition of a pediatric inpatient tower, would be located immediately adjacent to the existing MCH facility, southwest of the intersection of Atlantic Avenue and Columbia Street. The existing land use at this location is an 86-stall, multilevel parking structure. The parking structure would be demolished to accommodate the proposed pediatric inpatient tower. Access to the pediatric inpatient tower would be provided on multiple floors of the existing MCH facility and by a new pedestrian entrance on the west facade of the building. At build-out, the MCH would provide approximately 198,000 gross square feet.

Phase I of the MCH pediatric inpatient tower would provide approximately 124,500 square feet of new space for pediatric surgical services, imaging, lobby, newborn intensive care services, and general pediatric inpatient care services. It is anticipated that there would be a maximum of approximately 310 employees working in the building at one time. Phase I would consist of a four-story building with one story below grade and three stories above grade. The highest point of the Phase I structure would be approximately 84 feet above grade. The building would be identified by three illuminated building signs reading "Miller Children's Hospital" and by ground-level monument signs. The Phase I portion of the building would require 144 parking spaces. Phase I of the new pediatric inpatient tower is proposed to initiate construction in October 2005, with completion in January 2008. Phase II would provide approximately 73,500 square feet in a four-story vertical expansion of the Phase I structure. The highest point of the combined Phase I and Phase II structure would be approximately 148 feet above grade. The Phase II portion of the building would require 192 parking spaces. Construction of Phase II is contingent on the growth of inpatient pediatric cancer services, the needs of the Long Beach

community, and philanthropy. The likely dates to initiate and complete construction of Phase II of the MCH pediatric inpatient tower are January 2012 and June 2013, respectively.

Landscaping would be provided along Atlantic Avenue and 27th Street frontages consistent with City of Long Beach requirements and with the design guidelines for landscaping as contained in the 2005 Master Plan for the Campus. Landscaping within the Campus would be consistent with existing Campus landscaping.

A central plant building designed to support Phases I and II of the new pediatric inpatient tower would be constructed southwest of the intersection of Atlantic Avenue and Columbia Street. The existing land use at this location is landscape and hardscape associated with the edge treatment of the existing Miller Children's Hospital. Development of the central plant building would not require displacement of any parking spaces. The central plant building would consist of a single-level structure of approximately 3,500 square feet. Construction of the central plant building is proposed to begin in June 2006 and finish in August 2007. The central plant building would contain equipment and storage for the provision of emergency power, and chilled water. Provision for the storage of bulk medical oxygen for the pediatric inpatient tower would be accommodated in conjunction with the existing parking lot north of Columbia Street and east of Pasadena Avenue. The central plant building would be staffed by existing engineering staff. Therefore, no additional parking would be required for the central plant building. Vehicular access to the central plant building would be via a curb cut on Columbia Street.

The inpatient pediatric tower would be served by the central plant building via an underground utility trench along the eastern edge of the Campus, parallel to Atlantic Avenue. Utility piping between the central plant building and the inpatient tower would be direct buried within a protected, slurry backfilled trench. The utility trench would be a permanent, underground facility that would not generate any additional demand for parking; therefore, no additional parking would be required for the utility trench.

II.4.4 Miller Children's Hospital—Pediatric Outpatient Building

A new pediatric outpatient building would be located south of the existing MCH facility, west of Atlantic Avenue, and approximately midway between Columbia Street and 28th Street. The existing land use at this location is a portion of the surface parking lot located north of 28th Street. Pedestrian access to the outpatient building would be provided from an entrance on the northwest facade of the building. The MCH outpatient building would provide approximately 80,000 gross square feet. The pediatric outpatient building would consist of a five-story, B-occupancy, medical office building housing an array of pediatric care clinics and support services. It is anticipated that there would be a maximum of approximately 140 employees working in the building at one time. The highest point of the building would be approximately 84 feet above grade. The MCH pediatric outpatient building is proposed to initiate construction in October 2005 and finish construction in May 2007. The building would be developed as a shell building, with internal tenant improvements for MCH-operated services and private physician practices. Four types of uses and clinics are under consideration for the outpatient pediatric building: (1) dental clinic, (2) pediatric rehabilitation, (3) children's and specialty care clinic, and (4) support space, including physician's offices.

Landscaping would be provided along the Atlantic Avenue frontage consistent with City of Long Beach requirements and with the design guidelines for landscaping as contained in the 2005 Master Plan for the Campus. Landscaping within the Campus would be consistent with existing Campus landscaping.

The pediatric outpatient building would require approximately 400 parking spaces. Construction of the pediatric outpatient building is contingent on the identification of funding, philanthropy, and lease agreements with private physician groups.

II.4.5 Miller Children's Hospital—Link Building

A new mixed-use building connecting the pediatric inpatient tower and the pediatric outpatient building would be located southwest of the intersection of Atlantic Avenue and 28th Street. The existing land use at this location is the existing Memorial Drive access road that would be realigned to accommodate the proposed inpatient tower. Access to the mixed-use building would be provided on multiple floors from the inpatient hospital to the north and the outpatient building to the south. Grade-level pedestrian entrances would also be provided on the east and west facades. The MCH link building would provide approximately 20,000 gross square feet. The link building tower would consist of a 50-foot-high, three-story building that would contain retail spaces, offices, and retail food service for the users of the adjacent inpatient tower and outpatient building. The MCH link building is proposed to initiate construction in July 2010 and finish construction in June 2011.

Landscaping would be provided along the Atlantic Avenue frontage consistent with City of Long Beach requirements and with the design guidelines for landscaping as contained in the 2005 Master Plan for the Campus. Landscaping within the Campus would be consistent with existing Campus landscaping.

The mixed-use building would require 50 parking spaces. Construction of the link building is contingent on the identification of a funding source.

11.4.6 Roadway Realignment

Vehicular and pedestrian circulation patterns would be improved through the realignment of selected internal roadways and through a signage and wayfinding program. Specifically, a 520-linear-foot section of the alignment of Patterson Street/Memorial Medical Campus Drive as it extends through the Campus would be realigned southward by approximately 300 feet from its current intersection, at Atlantic Avenue near 28th Street on the east side of the Campus, to make a closer connection with the existing alignment of Patterson Street at Atlantic Avenue. As a result, the intersection of Atlantic Avenue and 28th Street would become a T-intersection. The roadway would consist of three site entry lanes and three site exit lanes with an automated traffic control gate for each lane. The present roadway is approximately 85 feet wide at Atlantic Avenue. The roadway would narrow to 40 feet where it transitions to the existing alignment of Patterson Street near Pasadena Avenue. The road curvature has a radius of approximately 500 feet to transition from Patterson Street to the existing roadway alignment. The roadway realignment would result in the loss of 200 parking spaces from the surface parking lot located north of 27th Street. The existing T-intersection at Atlantic Avenue and Patterson Street would be replaced by a signalized through intersection. The grading and realignment would be undertaken such that the roadway and curbs are adjusted to provide access to adjacent buildings at the first-floor level. The roadway realignment is proposed to initiate construction in July 2005 and finish construction in October 2005.

11.4.7 Parking Program

A phased parking program would be designed to provide 1,418 parking spaces required to meet code parking requirements for the proposed development through the combined use of existing excess parking surplus (259 spaces), temporary lease of off-site adjacent surface parking lots (up to 534 spaces), development of on-site surface parking lots (up to 515 spaces), and development of an on-site

parking structure (up to 1,700 spaces). It is anticipated that the phased parking program would consider the use of surface parking areas on property owned by the LBMMC, nearby off-site surface parking areas, including Lots L and M that could be leased by the LBMMC for a period of five years or longer, and possible future construction of one or more parking structures when justified by total demand. City approvals to construct and operate Campus buildings will be contingent on LBMMC and MCH's ability to demonstrate the availability of long-term parking. All on-site parking would be developed in areas designated for interim or permanent use of parking in the Master Plan of Land Uses. This would include demolition of the 51 existing residential units to create surface parking (Lots Q, R, S, and T). If determined to be necessary, a multilevel parking structure capable of accommodating several hundred spaces per level would be sited in an area designated for long-term parking. Development of the parking structure within Parking Lot K as an easterly expansion of the existing parking structure has been identified as a feasible location, and was used as the basis for the environmental analysis in this EIR. Surface parking areas and structures would be landscaped. However, the LBMMC would apply for a code exception to the City of Long Beach landscaping requirements to allow for planting of significantly less than the one 24-inch tree per four spaces normally required. All parking facilities constructed by the LBMMC would incorporate best management practices consistent with the requirements of the Regional Water Quality Control Board.

II.4.8 Construction Scenario

Construction would be scheduled in compliance with City of Long Beach regulations, and would commence at 7:00 a.m. and cease no later than 8:00 p.m. on weekdays. Work would be conducted on Saturdays, and would commence at 7:00 a.m. and cease no later than 5:00 p.m. Any expansion, construction, or development undertaken pursuant to the 2005 Master Plan must comply with the California Department of Health Services Criteria for Separation of Water Mains and Non-Potable Pipelines. The information contained in the construction scenarios for reasonably anticipated proposed project elements was developed from empirical data for construction of comparable projects and was used in the assessment of potential construction impacts to air quality, ambient noise levels, and traffic and circulation.

The construction scenario for the proposed project is envisioned as a 10-step process to be completed in eight years between 2005 and 2013, where construction of certain elements is contingent on the availability of funding. The sequence of the construction scenario has been developed based on the most aggressive scenario to allow consideration of a reasonable worst-case scenario.

II.4.8.1 Master Plan of Land Uses

The proposed Master Plan of Land Uses provides a conceptual framework for the reorganization of the pattern of land uses within the Campus. Construction, operation, and maintenance of new Campus elements that are reasonably foreseeable are evaluated at the project level of detail in this Draft EIR. Development of other future elements, consistent with the land use designations provided in the Master Plan of Land Uses, would need to be evaluated by the City of Long Beach on a case-by-case basis to determine if the activity constitutes a project pursuant to CEQA. If future activities are determined to constitute a project, then the City of Long Beach would need to determine the appropriate level of environmental documentation to be prepared to support the decision-making process related to the proposed element. Revisions to the Master Plan of Land Uses would be subject to a discretionary decision by the City of Long Beach and the appropriate related level of environmental review pursuant to CEQA.

II.4.8.2 Todd Cancer Institute

The 125,930-gross-square-foot TCI building would be constructed in two phases. Phase I of the TCI consists of the construction of 83,630 gross square feet. Construction of Phase I would be anticipated to be initiated in July 2005 and completed by December 2007. Phase II consists of 45,500 gross square feet. Construction of Phase II would be undertaken on an as-needed basis that is anticipated to occur no sooner than year 2010. The estimated duration of construction for Phase II is 18 months. Construction staging would be accomplished within the build-out area of Phases I and II of the TCI and associated parking area.

Phase I

A list of the type and quantity of equipment that would potentially be used in the construction of the TCI is provided in Table II.4.8.2-1, *Anticipated Equipment for Construction of TCI Phase I*.

TABLE II.4.8.2-1
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF TCI PHASE I

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities
2	Dozer	18 trips	12 weeks
1	Front-end loader	4 Trips	12 weeks
1	Water truck	20 trips	130 weeks
1	Grader	4 trips	12 weeks
60	Pick-up truck	39,000 trips	130 weeks
5	Dump truck	280 trips	12 weeks
3	Crane	3 trips	70 weeks
16	Concrete mix truck	500 trips	100 weeks
1	Roller	4 trips	7 weeks
15	Materials delivery	650 trips	130 weeks
3	Fork lift / grade all	10 trips	100 weeks

Construction of TCI Phase I would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; building construction; landscaping; and fencing. Approximately 90 workers would be expected to be on site during peak construction activity periods. Fewer than 90 workers would be expected to be on site during nonpeak construction activity periods.

Phase II

A list of the type and quantity of equipment that would potentially be used in the construction of the TCI is provided in Table II.4.8.2-2, *Anticipated Equipment for Construction of TCI Phase II*.

TABLE II.4.8.2-2
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF TCI PHASE II

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities
2	Dozer	18 trips	7 weeks
1	Front-end loader	2 trips	7 weeks
1	Water truck	10 trips	72 weeks
1	Grader	2 trips	7 weeks
35	Pick-up truck	21,450 trips	72 weeks
3	Dump truck	155 trips	10 weeks
3	Crane	3 trips	45 weeks
9	Concrete mix truck	250 trips	65 weeks
1	Roller	4 trips	7 weeks
8	Materials delivery	450 trips	72 weeks
2	Fork lift / grade all	6 trips	65 weeks

Construction of TCI Phase II would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 55 workers would be expected to be on site during peak construction activity periods. Fewer than 55 workers would be expected to be on site during nonpeak construction activity periods.

II.4.8.3 Miller Children's Hospital—Pediatric Inpatient Tower, Utility Trench, and Central Plant Building

The 198,000-gross-square-foot pediatric inpatient tower would be constructed in two phases. Phase I of the pediatric inpatient tower consists of the construction of 124,500 gross square feet. Construction of Phase I would be anticipated to be initiated in July 2005 and completed by December 2007. Phase II consists of 73,500 gross square feet. Construction of Phase II would be undertaken on an as-needed basis that is anticipated to occur no sooner than year 2012. The estimated duration of construction for Phase II is two years. The pediatric inpatient tower requires construction of a central plant building. The central plant building would be constructed concurrently with Phase I of the pediatric inpatient tower. The central plant building would be constructed with sufficient capacity to support the anticipated ultimate build-out of pediatric inpatient services. The central plant building would also provide redundant support to other inpatient services on the Campus. The link building and the pediatric outpatient building would be constructed with their own utility connections and would function independently of the hospital buildings. The central plant building would consist of a singlelevel structure of approximately 3,000 gross square feet. The pediatric inpatient tower would be served by the central plant building via an underground utility trench along the northeastern edge of the existing Miller Children's Hospital, parallel to Atlantic Avenue, which would be constructed concurrently with the pediatric inpatient tower.

Phase I Pediatric Inpatient Tower

Construction of Phase I of the pediatric inpatient tower would be anticipated to be initiated in July 2005 and completed by December 2007. A list of the type and quantity of equipment that would

potentially be used in construction of Phase I of the pediatric inpatient tower is provided in Table II.4.8.3-1, Anticipated Equipment for Construction of Pediatric Inpatient Tower Phase I.

TABLE II.4.8.3-1 ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF PEDIATRIC INPATIENT TOWER PHASE I

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities
3	Dozer	15 trips	19 weeks
2	Drill rig	4 trips	16 weeks
1	Man lift	2 trips	80 weeks
2	Front-end loader	8 trips	20 weeks
1	Water truck	20 trips	80 weeks
2	Grader	4 trips	19 weeks
96	Pick-up truck	50,400 trips	105 weeks
8	Dump truck	450 trips	19 weeks
3	Crane	3 trips	80 weeks
26	Concrete mix truck	1,200 trips	80 weeks
1	Roller	4 trips	15 weeks
24	Materials delivery	600 trips	105 weeks
5	Fork lifts / grade all	10 trips	90 weeks

Construction of Phase I of the pediatric inpatient tower would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; building construction; landscaping; and fencing. Approximately 144 workers would be expected to be on site during peak construction activity periods. Fewer than 140 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished with the parking area of Phase I of the pediatric inpatient tower.

Phase II Pediatric Inpatient Tower

A list of the type and quantity of equipment that would potentially be used in construction of Phase II of the pediatric inpatient tower is provided in Table II.4.8.3-2, *Anticipated Equipment for Construction of Pediatric Inpatient Tower Phase II*.

TABLE II.4.8.3-2 ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF PEDIATRIC INPATIENT TOWER PHASE II

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities
1	Dozer	2 trips	6 weeks
1	Man Lift	2 trips	80 weeks
1	Water truck	2 trips	6 weeks
56	Pick-up truck	34,320 trips	104 weeks
1	Dump truck	40 trips	11 weeks
2	Crane	4 trips	80 weeks
15	Concrete mix truck	745 trips	100 weeks
1	Roller	2 trips	6 weeks
13	Materials delivery	550 trips	104 weeks
3	Fork lift / grade all	10 trips	80 weeks

Construction of Phase II of the pediatric inpatient tower would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 85 workers would be expected to be on site during peak construction activity periods. Fewer than 85 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking and the build-out area of Phase II of the pediatric inpatient tower.

Utility Trench

Construction of Phase I would be anticipated to be initiated in August 2006 and completed by March 2007. A list of the type and quantity of equipment that would potentially be used in construction of the central plant building to support Phase II of the pediatric inpatient tower is provided in Table II.4.8.3-3, *Anticipated Equipment for Construction of Utility Trench*.

TABLE II.4.8.3-3
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF UTILITY TRENCH

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities		
1	Dozer	1 trips	20 weeks		
1	Front-end loader	2 trips	20 weeks		
1	Water truck	2 trips	34 weeks		
1	Grader	1 trips	4 weeks		
6	Pick-up truck	1,080 trips	34 weeks		
2	Dump truck	200 trips	12 weeks		
1	Crane	1 trips	12 weeks		
2	Concrete mix truck	180 trips	34 weeks		
1	Roller	1 trips	4 weeks		
1 Materials delivery		120 trips	34 weeks		

Construction of the utility trench to support the MCH expansion would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 20 workers would be expected to be on site during peak construction activity periods. Fewer than 20 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished with the staging areas of MCH.

Central Plant Building

Construction of the central plant building would be anticipated to be initiated in March 2007 and completed by December 2007. A list of the type and quantity of equipment that would potentially be used in construction of the central plant building to support Phase II of the pediatric inpatient tower is provided in Table II.4.8.3-4, Anticipated Equipment for Construction of Central Plant Building.

TABLE II.4.8.3-4
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF CENTRAL PLANT BUILDING

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities 12 weeks 43 weeks 12 weeks			
1	Dozer	1 trips				
1	Water truck	2 trips				
1	Grader	1 trips				
25	Pick-up truck	5,000 trips	43 weeks			
1	Dump truck	60 trips	12 weeks			
1	Crane	1 trips	25 weeks			
2	Concrete mix truck	360 trips	43 weeks			
1	Roller	1 trips	4 weeks			
1 Materials delivery		200 trips	43 weeks			
11	Fork lift / grade all	2 trips	25 weeks			

Construction of the central plant building to support the MCH expansion would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 50 workers would be expected to be on site during peak construction activity periods. Fewer than 50 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking area of MCH.

II.4.8.4 Miller Children's Hospital—Pediatric Outpatient Building

The MCH pediatric outpatient building would provide approximately 80,000 gross square feet. The outpatient building would consist of a five-story, B-occupancy, medical office building housing an array of pediatric care clinics and support services. Construction of the outpatient building is contingent on the identification of funding, philanthropy, and lease agreements with private physician groups that would be anticipated to be constructed in an 18-month time period initiated for construction no sooner than January 2006.

A list of the type and quantity of equipment that would potentially be used in the construction of Phase I of the pediatric outpatient building is provided in Table II.4.8.4-1, *Anticipated Equipment for Construction of Pediatric Outpatient Building*.

TABLE II.4.8.4-1
ANTICIPATED EQUIPMENT FOR CONSTRUCTION
OF PEDIATRIC OUTPATIENT BUILDING

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities			
3	Dozer	15 trips	22 weeks			
1	Water truck	20 trips	50 weeks			
2	Drill rig	4 trips	20 weeks			
1	Man lift	2 trips	60 weeks			
3	Front-end loaders	4 trips	22 weeks			
2	Grader	4 trips	22 weeks			
96	Pick-up truck	59,904 trips	78 weeks			
8	Dump truck	450 trips	22 weeks			
3	Crane	6 trips	50 weeks			
26	Concrete mix truck	1,500 trips	78 weeks			
1	Roller	4 trips	20 weeks			
24	Materials delivery	500 trips	78 weeks			
6	Fork lift / grade all	12 trips	60 weeks			

Construction of the pediatric outpatient building would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; building construction; landscaping; and fencing. Approximately 144 workers would be expected to be on site during peak construction activity periods. Fewer than 140 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking area of MCH.

II.4.8.5 Miller Children's Hospital—Link Building

A new, 20,000-gross-square-foot, mixed-use building connecting the pediatric inpatient tower and the pediatric outpatient building would be located southwest of the intersection of Atlantic Avenue and Patterson Street. Construction of the link building is contingent on the identification of a funding source, and the building would be anticipated to be constructed in a 12-month time period and initiated for construction no sooner than July 2010.

A list of the type and quantity of equipment that would potentially be used in the construction of the MCH link building is provided in Table II.4.8.5-1, *Anticipated Equipment for Construction of MCH Link Building*.

TABLE II.4.8.5-1
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF MCH LINK BUILDING

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities		
2	Dozer	4 trips	12 weeks		
1	Front-end loader	2 trips	12 weeks		
1	Water truck	2 trips	50 weeks		
1	Grader	2 trips	12 weeks		
35	Pick-up truck	21,450 trips	72 weeks		
3	Dump truck	100 trips	12 weeks		
3	Crane	3 trips	50 weeks		
9	Concrete mix truck	465 trips	65 weeks		
1	Roller	2 trips	7 weeks		
8	Materials delivery	275 trips	72 weeks		
2 Fork lift / grade all		4 trips	50 weeks		

Construction of the MCH link building would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 55 workers would be expected to be on site during peak construction activity periods. Fewer than 55 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking areas of MCH.

II.4.8.6 Roadway Realignment

Vehicular and pedestrian circulation patterns would be improved through the realignment of selected internal roadways and a signage and wayfinding program. Specifically, a 520-linear-foot section of the alignment of Patterson Street/Memorial Medical Center Drive as it extends through the Campus would be realigned southward by approximately 300 feet from its current intersection at Atlantic Avenue, near 28th Street on the east side of the Campus, to make a connection with the existing alignment of Patterson Street at Atlantic Avenue. As a result, the intersection of Atlantic Avenue and 28th Street would become a T-intersection. The roadway would consist of three site entry lanes and three site exit lanes, with an automated traffic control gate for each lane. The present roadway is approximately 85 feet wide at Atlantic Avenue. The roadway would narrow to 40 feet where it transitions to the existing

alignment of Patterson Street near Pasadena Avenue. The road curvature uses a radius of approximately 500 feet to transition from Patterson Street to the existing roadway alignment.

A list of the type and quantity of equipment that would potentially be used in the construction of the roadway realignment is provided in Table II.4.8.6-1, Anticipated Equipment for Construction of Roadway Realignment.

TABLE II.4.8.6-1
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF ROADWAY REALIGNMENT

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities			
2	Hydraulic excavator	4 trips	6 weeks			
2	Water truck	8 trips	20 weeks			
2	Grader	6 trips	9 weeks 52 weeks 20 weeks			
8	Pick-up truck	4,160 trips				
5	Dump truck	186 trips				
2	Asphalt paver	6 trips	3 weeks			
7	Concrete mix truck	8,910 trips	22 weeks			
1	Roller	6 trips	9 weeks			
3	Rubber tire loader	6 trips	12 weeks			
6 Materials delivery		380 trips	22 weeks			

Construction of the roadway realignment would require connection to existing utilities, sewer facilities, and storm water drain facilities; paving; and building construction. Approximately 50 workers would be expected to be on site during peak construction activity periods. Fewer than 50 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking areas of the MCH.

II.4.8.7 Parking Program

A phased parking program would be designed to accommodate up to 2,986 parking stalls in surface parking areas on property owned by LBMMC, which would include demolition of 51 residential units, nearby off-site surface parking areas that could be leased by LBMMC, and possible future construction of one or more parking structures when justified by total demand. If it is determined to be necessary, a multilevel parking structure capable of accommodating several hundred spaces per level would be sited in an area designated for long-term parking. There is sufficient area in Parking Lot K to accommodate a parking structure east of the existing parking structure. For each element of the proposed project, sufficient parking would be constructed to accommodate any existing parking spaces displaced by construction, and sufficient additional parking would also be constructed to accommodate the parking demand generated by the construction of the proposed project element.

A list of the type and quantity of equipment that would potentially be used in construction of the parking facilities is provided in Table II.4.8.7-1, *Anticipated Equipment for Construction of Parking Facilities*.

TABLE II.4.8.7-1
ANTICIPATED EQUIPMENT FOR CONSTRUCTION OF PARKING FACILTIES

Quantity (Approximate)	Туре	Total Number of Trips to and from Site during Construction	Duration of On-Site Construction Activities		
3	Hydraulic excavator	6 trips	9 weeks		
3	Water truck	12 trips	20 weeks		
3	Grader	6 trips	14 weeks		
12	Pick-up truck	6,240 trips	78 weeks		
8	Dump truck	278 trips	12 weeks		
3	Asphalt paver	6 trips	5 weeks		
11	Concrete mix truck	5,200 trips	33 weeks		
5	Roller	10 trips	14 weeks		
5	Rubber tire loader	10 trips	18 weeks		
9	Materials delivery	400 trips	33 weeks		

Construction of parking facilities would require connection to existing utilities, sewer facilities, and onsite storm water pollution prevention devices; paving; and possible construction of a parking structure. Approximately 75 workers would be expected to be on site during peak construction activity periods. Fewer than 75 workers would be expected to be on site during nonpeak construction activity periods. Construction staging would be accomplished within the parking area of the MCH.

II.5 INTENDED USES OF THE EIR

The City of Long Beach is the Lead Agency under CEQA. The Long Beach City Council will take final action on the proposed project. The Planning Commission will consider certification of the Final EIR prior to considering recommendations to the Long Beach City Council. It requires the following related discretionary approvals before the implementation of the proposed project:

- Long-Range Development Plan (Master Plan) Approval
- Site Plan Review
- Zoning District Change
- Standard Variances

Specific project elements may be subject to additional permits as described in Table II.5-1, *Permit Requirements*.

TABLE II.5-1 PERMIT REQUIREMENTS

Agency	Permits and Approvals	How to Obtain Permit		
U.S. EPA	Asbestos and Lead-Based Paint Abatement	Application		
Cal/OSHPD	Plan Approval	Application		
Cal/OSHA	Demolition Permit	Application		
Cal/OSHA	Asbestos Worker Notification	Application		
California EPA, Department of Toxic Substances Control	Asbestos Abatement Notification	Application		
California Department of Toxics Substance Control	Health Risk Assessment and Work Plan	Application		
State Department of Oil and Gas Resources	Oil Well Abandonment Permits	Application		
Regional Water Quality Control Board	NPDES Permit	Application		
South Coast Air Quality Management District	Notification	Application		
City of Long Beach	Demolition Permit	Application		
City of Long Beach	SWPPP Drainage Permit	Application		
City of Long Beach	Road Encroachment Permit	Application		
City of Long Beach	Truck Haul Permit	Application		
City of Long Beach	Grading Permit	Application		
City of Long Beach	Building Permit	Application		

NOTES:

Cal/OSHA = California Division of Occupational Safety and Health

Cal/OSHPD = California Office of Statewide Health Planning and Development

EPA = Environmental Protection Agency

NPDES = National Pollutant Discharge Elimination System

SWPPP = Storm Water Pollution Prevention Plan

Permits and applications needed for specific environmental issues are presented throughout Section 3 of this Draft EIR.

II.6 RELATED PROJECTS

The area surrounding the Campus was examined to determine if there are any projects currently in progress or proposed for the future that could potentially add to the impacts of the proposed project, creating a cumulative significant impact.

Related projects that are anticipated within the next year and that lie within an approximate 1-mile radius of the proposed project site include those shown in Table II.6-1, List of Related Projects.

TABLE II.6-1 LIST OF RELATED PROJECTS

No.	Cumulative Project	Location	Description			
City	of Long Beach					
1,	Douglass Park Project (Case # 0404-13)	3855 North Lakewood Boulevard	349-lot subdivision, 1,400 DU, 400-room hotel, 3,300,000-SF commercial, and general light industrial 11-acre parkland			
2.	Windward Village Mobile Home Park (Case # 0308-19)	3595 Santa Fe Avenue	Subdivide the existing Windward Village Mobile Home Park			
3.	OOI Self Storage (Case # 0110-07)	712 West Baker Street	519,135-SF self-storage			
4,	Retail Center (Case # 0104-19)	3400 Long Beach Boulevard	7,000-SF retail and 1,500-SF fast-food restaurant			
5.	Commercial/Industrial Complex (Case # 0308-02)	1825 East Spring Street	101,000-SF industrial			
6.	Long Beach Sports Park (Case # 0211-03)	1000 East Spring Street	Youth golf center, 30,000-SF office building, athletic fields and courts, batting cages, and 23,000-SF skate park			
7.	Retail Center (Case # 0208-04)	1422 West Willow Street	5,750-SF retail			
8.	Medical Office (Case # 0102-02)	2702 Long Beach Boulevard	105,800-SF medical office building			
9.	Medical Office (Case # 0208-15)	2760 Atlantic Avenue	7,200-SF medical office building			
10.	Medical Office (Case # 0301-18)	2299 Pacific Avenue	2,000-SF medical office building			
11.	North Long Beach Police Station (Case # 0012-14)	4891 Atlantic Avenue	20,000-SF police station			
12.	New Comm. Rehab. Industries Building (Case # 0306-10)	1546 Anaheim Street	6,000-SF industrial building			
13.	Medical Office (Case # 0405-21)	3932 Long Beach Boulevard	7,000-SF medical office building			
14.	Walgreen's (Case # 0302-24)	3339 East Anaheim Street	11,656-SF drug store/pharmacy			
15.	Alamitos Ridge Residential (Case # 9809-02)*	2080 Obispo Avenue	106 single-family detached			
16.	Alamitos Green Residential*	East of Redondo Avenue, between Stearns Street and Hathaway Avenue	15 single-family detached			
1 <i>7</i>	Elementary School*	South of Hill Street, between Redondo Avenue and Obispo Avenue	1,450 students			
18.	Transitional Housing Facility (Case # 0206-12)	2001 River Avenue	201-room transitional housing facility			
19.	Cal State University, Long Beach Technology Park (Case # 9811-05 and 0003-19)	2000 West 19th Street	200,000-SF industrial and 200,000-SF research and development			

TABLE II.6-1 LIST OF RELATED PROJECTS, Continued

No.	Cumulative Project	Location	Description		
City	of Long Beach (continued)				
20,	Warehouse (Case # 0301-08)	2200 West Pacific Coast Highway	22,653-SF warehouse		
21.	Affordable Condominiums (Case # 0304-06)	1856 Long Beach Boulevard	60 condominiums		
22.	Commercial Building (Case # 0307-19)	1075 East Pacific Coast Highway	10,400-SF commercial building		
23.	Java Lanes Residential (Case # 0306-02)	3738–3800 East Pacific Coast Highway	79 condominiums		
24.	Affordable Condominiums (Case # 0301-16)	1593–1643 Pacific Avenue	43 condominiums		
25.	Commercial Center (Case # 0207-17)	325 East Anaheim Street	6,700-SF commercial center		
26.	Commercial Building (Case # 0210-19)	100–108 East Anaheim Street	4,000-SF commercial building		
27.	Mark Twain Public Library (Case # 0207-22)	1401 East Anaheim Street	16,000-SF public library		
28.	Commercial Building (Case # 0304-31 and 0310-06)	2215 East Anaheim Street	11,300-SF commercial building		
29.	Auto Zone (Case # 0401-27)	2923–2933 East Anaheim Street	5,400-SF auto parts store		
30.	Lofts (Case # 0105-10)	829 Pine Avenue	Convert existing commercial building to 16 lofts		
31.	Locust Avenue Residential (Case # 0110-05)	835 Locust Avenue	82 condominiums/townhouses		
32.	Commercial Building (Case # 0402-11)	940 Long Beach Boulevard	5,000-SF commercial building		
33.	Condominiums (Case # 0405-18)	838 Pine Avenue	Convert 83 apartments to 83 condominiums/townhouses		
City	of Signal Hill**				
34.	U.S. Storage	Northeast corner of California Avenue and 32nd Street	130,000-SF self-storage facility		
35.	Home Improvement/Retail	North of Spring Street, between Atlantic Avenue and California Avenue	138,708-SF home improvement, 23,700-SF garden center, 56,890-SF retail, 6,000-SF restaurant, and two 2,500-SF fast-food restaurants		
36.	A and A Ready Mix	Northwest Corner of 27th Street and California Avenue	25 truck cement ready mix plant		
37.	Sixth Building Industrial	2700 Temple Avenue	60,000-SF industrial		
38.	Gundry Estates	Southeast Corner of Willow Street and Gundry Avenue	11 DU single-family detached		
39.	Las Brisas Phase II (Low-Income Housing)	Northeast Corner of California Avenue and Burnett Street	60 apartments		

TABLE II.6-1 LIST OF RELATED PROJECTS, Continued

No.	Cumulative Project	Location	Description		
City	of Signal Hill** (continued)				
40.	Hilltop Specific Plan	Skyline Drive, east of Cherry Avenue	100 single-family detached, 194 multi-family attached		
41.	Hathaway Estates	Southwest Corner of Temple Avenue and Hathaway Avenue	20 single-family detached		
42.	Long Beach Unified School District Middle School	West of Cherry Avenue, south of 20th Street	850 student middle school		
43.	Cherry Avenue / 19th Street Condominiums	East of Cherry, between 19th Street and 20th Street	30 DU condominiums		

NOTES:

DU = Dwelling unit

SF = Square foot

** Based on conversation with Gary Jones, City of Signal Hill, September 24, 2004.

SOURCE: City of Long Beach. 30 June 2004. "Major Projects List." Contact: 333 West Ocean Boulevard, Long Beach, CA 90802.

II.7 PROJECT ALTERNATIVES

As a result of the project formulation process, the City of Long Beach explored two alternatives to the proposed project to assess their ability to meet most of the proposed project objectives. The Technical Advisory Committee met on August 11, 2004, to review this proposed project, which resulted in three alternatives, including the No Project Alternative required under CEQA, being carried forward for detailed analysis in this Draft EIR. The alternatives included the following:

- No Project Alternative
- Alternative A, consisting of a delayed start for the TCI until adequate on-site or off-site parking can be secured
- Alternative B, consisting of expedited commitment to construct an on-site parking structure with a 1,700-car capacity

These alternatives are describes and analyzed in Section 4.0 of this Draft EIR.

^{*} Based on Traffic Impact Study for Alamitos Ridge prepared by LLG Pasadena, December 9, 2002.

The Mitigation Monitoring Program (MMP) contained herein satisfies the requirements of the California Environmental Quality Act (CEQA) as they relate to the Environmental Impact Report (EIR) for the Long Beach Memorial Medical Center Expansion Project (project).

The EIR identifies mitigation measures that have been incorporated into the project to avoid, reduce, and mitigate significant impacts to aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, National Pollution Discharge Elimination System (NPDES), noise, public services, transportation and traffic, and utilities and service systems. This MMP has been designed to ensure compliance with mitigation measures defined in the EIR during implementation of the project. This MMP would be adopted by the City of Long Beach City Council. Table III-1, *Mitigation Monitoring Program, Long Beach Medical Center Expansion*, lists those mitigation measures required by the City of Long Beach (City) to mitigate or avoid significant impacts anticipated in association with the project description as presented in the EIR. It shall be the responsibility of the City to carry out the MMP by imposing the requirements of the mitigation measures throughout the implementation of the proposed project.

The monitoring program element of the MMP describes each required mitigation measure organized by impact area, with an accompanying delineation of the following:

- The agency or agencies (or private parties) responsible for implementation
- The period of the project during which implementation of the mitigation measure is to be monitored
- The Enforcement Agency (the agency with the power to enforce the mitigation measure)
- The Monitoring Agency (the agency to whom the reports are made)

As the indicated mitigation measures are completed, the Monitoring Agency will sign and date the MMP to indicate that the required mitigation measure has been completed for the subject period. The Monitoring Agency will also note the documentation (title of the monitoring report) that was submitted for each mitigation measure. The source, signature, and date are indicated in the last two columns of Table III-1 and are intended for use as a working document during project implementation. These columns would be completed as each mitigation measure is completed and the documentation of compliance is submitted.

			Affect	ed Eler	nent of	Projec			Responsible	Monitoring	Enforcement	Monitoring	Documentation of Compliance	
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
esthetics	6 7		1216	WE I		Tocs.				TALL HOLL				
Aesthetics-1														
The City of Long Beach (City) shall ensure that the potential increase in the amount of light and glare produced due to implementation of the security lighting provided for each element of the project shall be reduced to below the threshold of significance by mandating the design type of the light fixtures, light standard height, and light fixture and standard orientation. The City of Long Beach shall ensure that prior to completion of final plans and specifications for each structural element of the project, lighting plans and specifications shall be submitted to the City of Long Beach Department of Public Works to ensure that all light fixtures shall use glare control visors, arc tube suppression caps, and a photometric design that maintains 70 percent of the light intensity in the lower half of the light beam, or comparable design or technology, to achieve those criteria. The City of Long Beach shall ensure that this requirement applies to all elements of the project: Todd Cancer Institute Phases I and II; Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, and central plant building; MCH pediatric outpatient building; MCH link building; roadway realignment; and parking improvements. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Public Works.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Department of Public Works	City of Long Beach Department of Public Works	Project plans and specifications and project lighting plan	(Signature and Date of Monitoring Agency
Nesthetics-2														
The City of Long Beach shall ensure that the potential increase in the amount of glare produced due to implementation of the structural elements of the project shall be reduced to below the threshold of bignificance by mandating the design type of the reflective surface of the buildings, careful selection of exterior building materials, and window glass treatments. The City of Long beach shall also ensure that prior to the completion of final plans and specifications for each structural element of the project, plans and specifications shall be submitted to the City of Long Beach Department of Public Works to ensure that the selection of exterior building materials and window glass treatments would not create uncomfortable levels of glare on bublic roadways or surrounding redirected areas for the structural elements of the project: Todd Cancer Institute Phases I and II, Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, MCH pediatric outpatient building, and MCH link building. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach Department of Public Works.	X	X	X	X	X	X			Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Department of Public Works	City of Long Beach Department of Public Works	Project plans and specification and project lighting plan	(Signature and Date of Monitoring Agency
Air Quality				e T	EUS.					- 2				THE WITE IS
hir-1														
As part of the request for the demolition permit for the 86-car parking structure, the WIC Building, and existing structures located in areas specified for development of surface parking areas Q, R, S, and T, the long Beach Memorial Medical Center shall demonstrate that asbestoscontaining materials (ACM) in these structures have been identified and			X				X		Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	City of Long Beach Department of Building and Planning	South Coast Air Quality Management District Rule 1403	(Signature and Date of Monitoring Agency

Mitigation Measure			7"	ed Elen	nent of	Projec	-	99 H	Responsible	Monitoring	Enforcement	Monitoring	Documentation of Compliance		
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dequately abated, or that the contractor has been informed of the need identify and abate ACM consistent with the requirements of South coast Air Quality Management District (SCAQMD) Rule 1403. pecifically, all ACM shall be removed and encapsulated prior to emolition, such that no asbestos fibers are released.													1		
ir-2															
rior to advertising for construction bids for each structural element of the project, the plans and specifications shall be reviewed by the lead gency to ensure that the requirement to comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Rule 402, and Rule 403, is included. The Office of Statewide lealth Planning and Development shall be the lead agency for the diller Children's Hospital (MCH) pediatric inpatient tower Phases I and the central plant building, and utility trench. The City of Long Beach and be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the MCH link building, the MCH link building, the pediatric outpatient building, the MCH link buildin	X	X	X	X	X	X		X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	City of Long Beach Department of Building and Planning	Project plans and specifications, Rule 402, Rule 403, and Rule 1403 compliance plan	(Signature and Date of Monitoring Agency	
ir-3 oil moistening shall be required to treat exposed soil during	Х	X	X	X	X	x	X	X	Long Beach	Preconstruction/	Southern	Office of	Project plans and		
onstruction of each element of the project to avoid fugitive dust missions, ensure compliance with current air quality standards, and void contributions to cumulative increases in criteria pollutants. Prior of advertising for construction bids for each element of the project, the lans and specifications shall be reviewed by the lead agency to ensure that the requirement for the construction contractor to ensure that soil is noistened prior to grading and that soil moisture content is maintained at a minimum of 12 percent for all grading activities is included. The office of Statewide Health Planning and Development shall be the lead gency for the Miller Children's Hospital (MCH) pediatric inpatient ower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute thases I and II, the MCH pediatric outpatient building, the MCH link uilding, the roadway realignment, and the parking facilities. The construction contractor shall demonstrate compliance with this measure brough the submission of weekly monitoring reports to the lead									Memorial Medical Center	Construction	California Air Quality Management District	Statewide Health Planning and Development City of Long Beach Department of Building and Planning	specifications, weekly monitoring reports	(Signature and Date of Monitoring Agency	

Long Beach Memorial Medical Center Expansion
May 2005
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Mitigation Monitoring Program Sapphos Environmental, Inc. Page III-3

Mitigation Measure	OR N		Affect	ed Elen	nent of	Proje		9 (4)	Responsible	Monitoring Period	Enforcement	Monitoring	Documentation of Compliance		
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agency. At a minimum, active operations shall utilize one or more of the applicable best available control measures to minimize fugitive dust emissions from each fugitive dust source type that is part of the active operation.									. utty						
Air-4						1							=0		
Soil moistening shall be required to treat grading areas during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Prior to advertising for construction bids for each element of the project, the lead agency shall ensure that the plans and specifications for each element of the project-include the requirement for the construction contractor to ensure that soil shall be moistened not more than 15 minutes prior to the daily commencement of soil-moving activities and three times a day, or four times a day under windy conditions, in order to maintain a soil moisture content of 12 percent. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, MCH pediatric outpatient building, MCH link building, roadway realignment, and parking facilities.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
lir-5						-									
Application of water or a chemical stabilizer shall be required to treat grading areas during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. Prior to advertising for construction bids for each element of the project, the lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to apply water or a chemical stabilizer to maintain a stabilized surface on the last day of active operations prior to a weekend or holiday. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Air-6									+						
Moistening or covering of excavated soil piles shall be required to treat grading areas during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for the project, the lead agency shall ensure that the plans and specifications	X	X	X	X	X	Х	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long	Project plans and specifications	(Signature and Date of Monitoring Agency	

	-		Affect	ed Elen	nent of	Projec	t		Implementation	Monitoring Enforcement Period Agency	Enforcement	t Monitoring Agency	Documentation of Compliance		
Mitigation Measure	A	В	C	D	E	F	G	Н					Source	Signature and Date	
for each element of the project include the requirement for the construction contractor to ensure that excavated soil piles are watered hourly for the duration of construction or covered with temporary coverings. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, roadway realignment, and the parking facilities.									Tanty			Beach Department of Building and Planning			
Air-7															
Discontinuing grading activities during windy conditions shall be required to treat grading areas during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for each element of the project, the lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to cease grading during periods when winds exceed 25 miles per hour. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	X	X	X	X	X	х	х	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Air-8															
Moistening excavated soil prior to loading on trucks shall be required at all grading areas during construction of each element of the project to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in critical pollutants. Prior to advertising for construction bids for the project, the lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to moisten excavated soil prior to loading on trucks. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Air-9															
Transport of soils to and from the project site for each element of the project shall be conducted in a manner that avoids fugitive dust emissions, ensures compliance with current air quality standards, and avoids contributions to cumulative increases in criteria pollutants. Prior	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management	Office of Statewide Health Planning and Development	Project plans and specifications	(Signature and Date of Monitoring Agency	

		S = 1	Affect	ed Elen	nent of	Projec	t	PH.	Responsible	Monitoring	Enforcement	Monitoring	Documentation of Compliance		
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date	
to advertising for construction bids for each element of the project, the lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to cover all loads of dirt leaving the site or to leave sufficient freeboard capacity in the truck to prevent fugitive dust emissions en route to the disposal site. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.											District	City of Long Beach Department of Building and Planning			
Air-10															
Washing of wheels leaving the construction site during construction of each element of the project shall be required to avoid fugitive dust emissions, ensure compliance with current air quality standards, and avoid contributions to cumulative increases in criteria pollutants. The lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to clean adjacent streets of tracked dirt at the end of each workday or install on-site wheel-washing facilities. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Turning off engines and equipment when not in use shall be required to reduce vehicular emissions during construction of each element of the project. Prior to advertising for construction bids for the project, the lead agency shall ensure that the plans and specifications for each element of the project include the requirement for the construction contractor to reduce idling emissions by turning off equipment and truck engines when not in use for five minutes or more. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	х	X	х	х	X	х	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management District	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Air-12															
Concurrent use of multiple pieces of heavy equipment beyond the levels described in the construction scenarios shall be prohibited to the maximum extent feasible to reduce vehicular emissions. Prior to advertising for construction bids for each element of the project, the	Х	X	X	X	X	Х	Х	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Southern California Air Quality Management	Office of Statewide Health Planning and Development	Project plans and specifications	(Signature and Date of Monitoring Agency	

		- 10-	Affect	ed Eler	nent of	Project			Responsible	Monitoring	Enforcement	Monitoring	Documentation of Compliance		
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date	
lead agency shall ensure that the plans and specifications include the requirement to minimize to the maximum extent practicable the concurrent use of multiple pieces of heavy equipment for each element of the project during construction activities. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.									Turty		District	City of Long Beach Department of Building and Planning			
Air-13															
Carpooling and use of public transportation shall be encouraged to reduce vehicular emissions. The lead agency shall ensure that the plans and specifications include the requirement for the construction contractor to encourage construction workers to use public transit and carpools. The Office of Statewide Health Planning and Development shall be the lead agency for the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench. The City of Long Beach shall be the lead agency for the Todd Cancer Institute Phases I and II, the MCH pediatric outpatient building, the MCH link building, the roadway realignment, and the parking facilities.	X	x	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	County of Los Angeles Department of Public Works	Office of Statewide Health Planning and Development City of Long Beach Department of Building and Planning	Project plans and specifications	(Signature and Date of Monitoring Agency	
Cultural	'X 'S			/				70.0		Line 2 has	WAS TELEVISION YO	- 11 10 10 10 10			
Cultural-1 The potential impact to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature from the project shall be reduced to below the level of significance by the presence of a qualified paleontological monitor during all ground-disturbing activities. The City of Long Beach shall ensure that any paleontological discoveries shall be removed in accordance with standards for such recovery established by the Society of Vertebrate Paleontology. Where the qualified vertebrate paleontologist identifies the potential for the grading plan to result in impacts to sites recorded to contain unique paleontological resources or sediments with a medium or high potential to contain significant paleontological resources, the City of Long Beach shall require a program for the recovery of the resources. This program must include, but not be limited to, the following: The program must include monitoring of excavation in areas likely to contain paleontologic resources by a qualified vertebrate paleontologic monitor. The monitor shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediments that are likely to contain the remains of small fossil vertebrates.	x	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Construction	Office of Historic Preservation	City of Long Beach Cultural Heritage Commission	Plans and specifications for ground disturbing activities, archaeological surveys, studies, or reports of field observation	(Signature and Date of Monitoring Agency	

Mitigation Measure	English White and Market All St. St. St. St.	V-1. 5	M.S.	Affecto	ed Elem	nent of	Project		100	Responsible	Monitoring Enforcement	Monitoring	Documentation of Compliance		
	A	В	С	D	E	F	G	н	Implementation Party	Period	Agency	Agency	Source	Signature and Date	
•	The program must include preparation of recovered specimens to a point of identification, including washing of sediments to recover small fossil vertebrates. The program must include identification and curation of specimens into a museum repository with retrievable storage. The program must include preparation of a report of findings with an appended, itemized inventory of the specimens. The report and inventory, when submitted to the appropriate lead agency, signifies the completion of the program to mitigate impacts to paleontologic resources.														
Cultural-2															
destruction of a be reduced to qualified archae within native so Long Beach sha the potential for archeological r monitoring by undertaken in n grading, excav unrecorded arc The plans and identify the nee archaeologist sl moved or expo project in the a archaeological i	cultural resources related directly or indirectly to the a unique archaeological resource from the project shall below the level of significance by the presence of a eological monitor during all ground-disturbing activities bils identified as Qal (quaternary alluvium). The City of all the earthmoving activity to uncover previously unrecorded resources is below the level of significance through a qualified archaeologist of all subsurface operations active soils identified as Qal, including but not limited to action, trenching, and recording of any previously theological resources encountered during construction, specifications for all ground-disturbing activities shall be on site during any activity when soil is to be orted. The archaeologist shall be authorized to halt the area of a finding, and mark, collect, and evaluate any materials discovered during construction. In addition, an aeological excavation shall be made (i.e., a sample test expresence of cultural resources.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Historic Preservation	City of Long Beach Cultural Heritage Commission	Specifications for ground disturbing activities, archaeological surveys, studies, or reports of field observation	(Signature and Date of Monitoring Agency
monitoring ar Gabrielino/Tong monitor to be activities related studies, or reg modification s archaeologist a Center at Califo during mitigatio	hat archaeological resources are encountered by the chaeologist, the archaeologist shall contact the gva Tribal Council and arrange for a Native American present on site during the remainder of excavation d to the project. Copies of any archaeological surveys, ports of field observation during grading and land hall be prepared and certified by the attendant and submitted to the South Central Coastal Information prinia State University Fullerton. Any artifacts recovered on shall be deposited in an accredited and permanent uccational institution for the benefit of current and future														

		ALXEY	Affect	ted Elen	nent of	Projec	t		Responsible	Monitoring	Enforcement	Monitoring	Docu	mentation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
Cultural-3														
The City of Long Beach shall ensure that impacts to cultural resource related to the unanticipated discovery of human remains be reduced to below the level of significance by ensuring that, in the event human remains are encountered, construction in the area of finding shall cease and the remains shall stay in-situ pending definition of an appropriate plan. The Los Angeles County Coroner (Coroner) shall be contacted to determine whether investigation of the cause of death is required. If the event that the remains are of Native American origin, the Native American Heritage Commission shall be contacted to determine necessary procedures for protection and preservation of remains including reburial, as provided in the State CEQA Guidelines, Section 15064.5(e), "CEQA and Archaeological Resources," CEQA Technical Advisory Series."	o n e e o n e e e o n	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Construction	Office of Historic Preservation	City of Long Beach Cultural Heritage Commission	Specifications for ground disturbing activities, archaeological surveys, studies, or reports of field observation	(Signature and Date of Monitoring Agency
n the event of accidental discovery or recognition of any huma emains in any location other than a dedicated cemetery, the followin teps shall be taken:	n g													
There shall be no further excavation or disturbance of the sit or any nearby area reasonably suspected to overlie adjacer human remains until:												0	12	
(A) The Coroner must be contacted to determine the no investigation of the cause of death is required and														
(B) If the Coroner determines the remains to be Nativ American:	e													
 The Coroner shall contact the Nativ American Heritage Commission within 2 hours. 														
 The Native American Heritage Commissions shall identify the person or persons believes to be the most likely descended from the deceased Native American. 	it													
 The most likely descendent may mak recommendations to the landowner or th person responsible for the excavation worl for means of treating or disposing of, wit appropriate dignity, the human remains an any associated grave goods as provided in Public Resources Code Section 5097.98. 	e <, h d									¥				
4. Where the following conditions occur, th landowner or his/her authorize	e d													

¹ California Resources Agency. 16 September 2004. California Environmental Quality Act, Article 5, §15064.5(e): "Determining the Significance of Impacts to Archeological and Historical Resources." Available at: http://ceres.ca.gov/topic/env_law/ceqa/guidelines/art5.html

	III IESS	- 35	Affecte	ed Elem	ent of	Projec	t	11 12	Responsible	Monitoring	Enforcement	Monitoring	Docum	nentation of Compliance
Mitigation Measure	Α	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
representative shall rebury the Native American human remains and associated grave goods, with appropriate dignity, in the property in a location not subject to further subsurface disturbance: (a) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission. (b) The descendant in identified fails to make a recommendation. (c) The landowner or his/her authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.														
Cheology and Soils Geology-1 The City of Long Beach shall reduce the exposure of people or property of potentially adverse effects, including the risk of loss or injury, involving seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric inpatient tower, Phases I and II, and the central plant building. Exposure shall be minimized through onformance with California Geological Survey's Guidelines for valuating and Mitigating Seismic Hazards in California and all pplicable City of Long Beach codes and regulations related to seismic citivity. The MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric inpatient tower, Phases I and II, and the central plant building are incorporated into project plans and pecifications. Prior to approval of final plans and specifications for the MCH pediatric inpatient tower, Phases I and II, and the central plant building, the Office of Statewide Health Planning and Development hall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.			X	X					Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development City of Long Beach Department of Public Works	Office of Statewide Health Planning and Development City of Long Beach Department of Public Works	Project Plans and Geotechnical Investigations/The California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California /Seismic Safety Element of the General Plan	(Signature and Date of Monitoring Agency
Geology-2													711	
The City of Long Beach shall reduce the exposure of people or property o potentially adverse effects, including the risk of loss or injury, involving seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link	Х	X			X	X		X	Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development,	Office of Statewide Health Planning and Development	Project plans and geotechnical investigations, California Geological	(Signature and Date of Monitoring Agency

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Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
building, the Todd Cancer Institute (TCI) Phases I and II, and the parking structure. Exposure shall be minimized through conformance with California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California and all applicable City of Long Beach codes and regulations related to seismic activity. The Long Beach Memorial Medical Center (LBMMC) and the MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric outpatient building, the MCH link building, the TCI Phases I and II, and the parking structure are incorporated into project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric outpatient building, the MCH link building, the TCI Phases I and II, and the parking structure, the City of Long Beach Department of Public Works shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.											Facilities Development Division	City of Long Beach Department of Public Works	Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California, and Seismic Safety element of the General Plan	
Geology-3														
The City of Long Beach shall reduce the exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving geologic hazards related to liquefaction from seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric inpatient tower, Phases I and II, and the central plant building. Exposure shall be minimized through conformance with all applicable State of California and City of Long Beach codes and regulations. The MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric inpatient tower, Phases I and II, and the central plant building are incorporated into project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric inpatient tower, Phases I and II, and the central plant building, the Office of Statewide Health Planning and Development shall review and ensure that all recommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.			X	X					Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development	Office of Statewide Health Planning and Development, Facilities Development Division City of Long Beach Department of Public Works	Project plans and geotechnical investigations, California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California, and Seismic Safety element of the General Plan	(Signature and Date of Monitoring Agency
Geology-4														
The City of Long Beach shall reduce the exposure of people or property to potentially adverse effects, including the risk of loss or injury, involving geologic hazards related to liquefaction from seismic ground shaking from the operation of the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, the Todd Cancer Institute (TCI) Phases I and II, and the parking structure. Exposure shall be minimized through conformance with all applicable State of California and City of Long Beach codes and regulations. The Long Beach Memorial Medical Center (LBMMC) and the MCH shall ensure that the site-specific geotechnical investigations for the MCH pediatric outpatient building, the MCH link building, the TCI Phases I and II, and the parking structure are incorporated into project plans and specifications. Prior to approval of final plans and specifications for the MCH pediatric outpatient building, the MCH link building, the TCI Phases I and II, and the parking structure, the City of Long Beach Department of Public Works shall review and ensure that all	X to	X			X	X		X	Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development City of Long Beach Department of Public Works	Office of Statewide Health Planning and Development, Facilities Development Division City of Long Beach Department of Public Works	Project plans and geotechnical investigations, California Geological Survey's Guidelines for Evaluating and Mitigating Seismic Hazards in California, and Seismic Safety element of the General Plan	(Signature and Date of Monitoring Agency

	65	10-	Affect	ed Elem	ent of	Project			Responsible	Monitoring	Enforcement	Monitoring	Docum	entation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
ecommendations of the site-specific geotechnical recommendations are incorporated into the final plans and specifications.							73							
Geology-5									40.2					
The City of Long Beach Department of Planning and Building shall require the construction contractor to implement best management practices that are consistent with the National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to avoid soil erosion during construction of the Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, and the central plant building. Prior to approval of final plans and specifications, the Office of Statewide Health Planning and Development (OSHPD) shall ensure that the requirement to comply with NPDES Permit No. CAS 004003 is included in the specifications. The OSHPD Inspector of Record shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003.			X	X					Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development	City of Long Beach Department of Planning and Building	National Pollution Discharge Elimination System Permit	(Signature and Date of Monitoring Agency
Geology-6														
The City of Long Beach Department of Planning and Building shall require the construction contractor to implement best management practices that are consistent with the National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to avoid soil erosion during construction of the Todd Cancer Institute (TCI) Phases I and II, the Miller Children's Hospital (MCH) pediatric outpatient building and utility trench, the MCH link building, the roadway realignment, the on-site parking areas (Lots N, P, Q, R, S, and T), and the parking structure. Prior to approval of final plans and specifications, the City of Long Beach Department of Planning and Building shall ensure that the requirement to comply with NPDES Permit No. CAS 004003 is included in the specifications. The City of Long Beach Department of Planning and Building shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003.	X	X			X	X	X	X	Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development	City of Long Beach Department of Planning and Building	National Pollution Discharge Elimination System Permit	(Signature and Date of Monitoring Agency
Hazards and Hazardous Materials						K)						E1070011		
Hazards-1 The Office of Statewide Health Planning and Development shall ensure avoidance of exposure to asbestos-containing materials (ACMs) and lead-based paints (LBPs) during demolition, construction, and remediation activities, the City of Long Beach and the Office of Statewide Health Planning and Development shall require that all such materials and wastes be identified and that an Operations and Maintenance (O&M) Plan be developed prior to the issuance of demolition permits for each structure constructed prior to 1979. The O&M Plan shall ensure compliance with all applicable federal, state, and local requirements and specify all work to be done, including lead and asbestos surveys of structures to be demolished, proper handling and storage of lubricants and fuels for construction equipment, and methods for remediation of ACMs and LBPs, if necessary. The O&M Plan must be submitted to the City of Long Beach Department of Health			Х			:		X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	City of Long Beach Department of Health City of Long Beach Department of Planning and Building	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency

			Affect	ed Elen	nent of	Project		1 39	Responsible	Monitoring	Enforcement	Monitoring	Docu	mentation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
for review and approval prior to initiation of construction and demolition activities for the Miller Children's Hospital pediatric inpatient tower and central plant building, and the construction of parking lots requiring the demolition of pre-1979 constructed buildings. The O&M Plan shall, as appropriate and necessary, conform to the requirements of the Los Angeles County Department of Health Services (Local Enforcement Agency for landfills), South Coast Air Quality Management District, the Los Angeles Regional Water Quality Control Board, and the Department of Toxic Substances Control. Compliance with the O&M Plan shall be monitored by the City of Long Beach Department of Planning and Building throughout construction and demolition.														
Hazards-2														
The Office of Statewide Health Planning and Development shall require that petroleum hydrocarbon–contaminated soils and water be tested, treated, and disposed as necessary under the oversight of the Department of Toxic Substances Control (DTSC) to reduce the potential for exposure of people or property to petroleum hydrocarbon–contaminated soils and water. The OSHPD shall review plans and specifications for those elements of the project to be constructed over unclassified fill: the Miller Children's Hospital (MCH) pediatric inpatient tower Phase I, the central plant building, and the utility trench. The OSHPD shall ensure that the project plans and specifications disclose the potential to encounter petroleum hydrocarbon–contaminated soils and water, and require the construction contractor to remove petroleum hydrocarbon–contaminated soils and water within the construction zone, in accordance with all applicable federal, state, and local statutes and regulations and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and DTSC.			X						Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
The City of Long Beach shall require that petroleum hydrocarbon-contaminated soils and water be tested, treated, and disposed of as necessary under the oversight of the Department of Toxic Substances Control (DTSC). The City of Long Beach shall review plans and specifications for those elements of the project to be constructed over unclassified fill: the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, and the Todd Cancer Institute Phases I and II. The City of Long Beach shall ensure that the project plans and specifications disclose the potential to encounter petroleum hydrocarbon—contaminated soils and water, and require the construction contractor to remove petroleum hydrocarbon—contaminated soils and water within the construction zone, in accordance with all applicable federal, state, and local statutes and regulations and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and DTSC.	X	х			х	х			Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Health	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency

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The project applicant and remediation contractor shall identify oil wells underlying the Miller Children's Hospital (MCH) pediatric inpatient tower Phase I, the central plant building, and the utility trench. The oil wells shall be properly abandoned to the current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The project applicant shall ensure that coordination with the DOGGR and proper remediation be incorporated into the construction plans, prior to final approval of plans for the MCH pediatric inpatient building Phase I, the central plant building, and the utility trench. If the oil wells cannot be identified through site survey by a licensed surveyor, excavation shall be undertaken to locate the wells under the oversight of the DOGGR and/or the Office of Statewide Health Planning and Development. If the abandoned oil wells are determined to be leaking, remediation shall be conducted to seal all leaks or venting systems shall be required to transmit gas safely away from the project site, in accordance with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.			X						Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development.	Department of Toxic Substances Control	Operations and Maintenance Plan, and California Department of Conservation, Division of Oil, Gas and Geothermal Resources Standards	(Signature and Date of Monitoring Agency
The remediation contractor shall identify oil wells underlying the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, and the Todd Cancer Institute Phases I and II. The oil wells shall be properly abandoned to the current standards of the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR). The project applicant shall ensure that coordination with the DOGGR and proper remediation be incorporated into the construction plans, prior to final approval of plans for the MCH pediatric outpatient building, the MCH link building, and the Todd Cancer Institute Phases I and II. If the oil wells cannot be identified through site survey by a licensed surveyor, excavation shall be undertaken to locate the wells under the oversight of the DOGGR and/or the City of Long Beach. If the abandoned oil wells are determined to be leaking, remediation shall be conducted to seal all leaks or venting systems shall be required to transmit gas safely away from the project site, in accordance with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.	X	X			X				Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach	Department of Toxic Substances Control	Operations and Maintenance Plan, and California Department of Conservation, Division of Oil, Gas and Geothermal Resources Standards	(Signature and Date of Monitoring Agency
Hazards-6 The Office of Statewide Health Planning and Development (OSHPD) shall require the installation of vapor barriers (i.e., high-density polyethylene membrane liners) and passive venting systems in the foundations of the Miller Children's Hospital pediatric inpatient tower and central plant building, if determined to be required by the Health Risk Assessment to mitigate potential accumulation of methane, hydrogen sulfide, or other petroleum-related gases into underground			Х			3			Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitorin Agency

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areas (i.e., basements) or inside buildings. Prior to the issuance of building permits for the specified buildings, the OSHPD shall review the plans and specifications to ensure that the appropriate vapor barriers or passive venting systems have been incorporated into the design and are consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.														
Hazards-7														
The City of Long Beach shall require the installation of vapor barriers (i.e., high-density polyethylene membrane liners) and passive venting systems in the foundations of the Miller Children's Hospital (MCH) pediatric outpatient building and the Todd Cancer Institute Phases I and II, if determined to be required by the Health Risk Assessment to mitigate potential accumulation of methane, hydrogen sulfide, or other petroleum-related gases into underground areas (i.e., basements) or inside buildings. The City of Long Beach shall review the plans and specifications to ensure that the appropriate vapor barriers or passive venting systems have been incorporated into the design and are consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control prior to the issuance of building permits for the specified buildings.	X	X			X	X			Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Health	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
Hazards-8														
The Office of Statewide Health Planning and Development shall review the grading plans to ensure that there is a note requiring the construction contractor to stop work and notify the Certified Unified Program Agency of the unanticipated encounter of underground storage tanks (USTs) during grading activities prior to the issuance of grading permits for the Miller Children's Hospital pediatric inpatient tower, central plant building, and utility trench. The UST shall be remediated in accordance with County of Los Angeles guidelines and consistent with specifications of the Voluntary Clean-up Agreement between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.			X						Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
Hazards-9													· · · · · · · · · · · · · · · · · · ·	
The City of Long Beach shall review the grading plans to ensure that there is a note requiring the construction contractor to stop work and notify the Certified Unified Program Agency of the unanticipated encounter of underground storage tanks (USTs) during grading activities prior to the issuance of grading permits for the permits for the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, and the Todd Cancer Institute Phases I and II. The City of Long Beach shall review the grading plans to ensure that the UST shall be remediated in accordance with County of Los Angeles guidelines and consistent with specifications of the Voluntary Clean-up Agreement	X	X			X	X			Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Department of Health	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency

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between the Long Beach Memorial Medical Center and the Department of Toxic Substances Control.									raity					
Hazards-10														
The City of Long Beach shall require that the construction contractor and the Long Beach Memorial Medical Center (LBMMC) store, use, and transport all hazardous materials in compliance with all relevant regulations and guidelines to avoid exposure to asbestos-containing materials, lead-based paints, petroleum hydrocarbon–contaminated soils, biomedical waste, and radiological waste during routine transport and disposal for both the construction phase and operational phase of the project. The routine transport of hazardous materials to and from the LBMMC campus during construction and operation of the elements of the project shall be accomplished via Atlantic Avenue, Spring Street, Columbia Street, Patterson Street, 27th Street, and Willow Street. Compliance shall be determined by monitoring by regulatory agencies. Transport, storage, and handling of construction-related hazardous materials shall be consistent with the guidelines provided by the California Department of Transportation, Los Angeles Regional Water Quality Control Board, the South Coast Air Quality Management District, and the Certified Unified Program Agency. Each agency shall regulate and enforce, through permitting and record keeping, the monitoring and enforcement of this mitigation measure.	X	X	X	X	X	X			Long Beach Memorial Medical Center	Preconstruction/ Construction/ Operations	City of Long Beach Department of Health	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
Hazards-11														
The City of Long Beach shall require the identification of an alternative emergency water supply source, evacuation routes, and emergency response vehicle routes during roadway realignment and upon expansion of the Miller Children's Hospital facility to avoid impacts on the existing emergency response and evacuation plan. The revised emergency response and evacuation plan shall be updated by the construction contractor prior to initiation of construction activities.			X	X					Long Beach Memorial Medical Center	Preconstruction/ Construction/	City of Long Beach Department of Health	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
Hazards-12														
The Office of Statewide Health Planning and Development shall require that volatile organic compounds (VOCs) be monitored during excavation requested for the Miller Children's Hospital pediatric inpatient tower, central plant building, and utility trench, in compliance with the South Coast Air Quality Management District Rule 1166 or Rule 1150, which sets requirements to control the emission of VOCs from excavating, grading, handling, and treating VOC-contaminated soil to avoid exposure to chemicals of potential concern (COPCs) in the soil. The procedures for removing, handling, and disposing of petroleum hydrocarbon–contaminated soil and water shall include and require adherence to health and safety protocols (e.g., no eating in the construction zone, use of personal protective equipment) as provided in a site health and safety plan, as well as monitoring and control of emissions of COPCs that may occur during the construction work.			Х						Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Department of Toxic Substances Control	Operations and Maintenance Plan, and South Coast Air Quality Management District Rule 1166 or Rule 1150	(Signature and Date of Monitoring Agency

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er ik de er de de de								Memorial Medical Center	Construction	Beach Department of Health	Toxic Substances Control	Maintenance Plan, and South Coast Air Quality Management District Rule 1166 or Rule 1150	(Signature and Date of Monitoring Agency
ic le th le		X	X					Long Beach Memorial Medical Center	Preconstruction	Office of Statewide Health Planning and Development	Department of Toxic Substances Control	Operations and Maintenance Plan	(Signature and Date of Monitoring Agency
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The Ciffic of Statewide Health Planning and Development (OSBPP) shall require the construction contractor to avoid engine, temporary of shall require the construction contractor to avoid engine plans, see of shifting depth of the Ciffic of Statewide Health plans and specifications require the construction contractor to expect of certain Activity, include the pregnation of a Notice of Intern and the implementation of a Local Storm Water Pollution Prevails and Experiment Plantics Health Construction of the Notice of Intern and the implementation of a Local Storm Water Pollution Prevails and Experiment Plantics Health Construction Plan (Notice of Intern, Storm Water Program) Development District Planting Prevails and Experiment Plantics Planting Planti	Mitigation Measure	A	В	С	D	E	F	G	Н					Source	Signature and Date
The Office of Statewide Health Planning and Development (OSHPD) half require the construction contractor to avoid erosion, transport of public traces the construction contractor to avoid erosion, transport of public traces and the public	Hydrology and Water Quality	217				FILE					m Market 1850				
The City of Long Beach Department of Public Works shall require the construction contractor to avoid erosion, transport of pollutants, and siltation during construction of the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, the Todd Cancer Institute Phases I and II, the roadway realignment, and the parking areas. Prior to final grading plans, the City of Long Beach Department of Public Works shall ensure that the plans and specifications require the construction contractor to comply with the revised General Construction Activity Storm Water Permit. Such compliance measures would, at a minimum, include the preparation of a Notice of Intent and the implementation of a Local Storm Water Pollution Prevention Plan (Signature and Date of Monitor Agency Signature and Date of Monitor Pollution Prevention Plan (Signature and Date of Monitor Plan (Si	The Office of Statewide Health Planning and Development (OSHPD) shall require the construction contractor to avoid erosion, transport of collutants, and siltation during construction of the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building. Prior to final grading plans, the OSHPD shall construct to comply with the revised General Construction Activity Storm Water Permit. Such compliance measures would, at a minimum, include the preparation of a Notice of Intent and the implementation of a Local Storm Water Pollution Prevention Plan (SWPPP) and a Wet Season Erosion Control Plan (for work between October 15 and April 15). These plans shall incorporate all applicable best management cractices (BMPs), as described in the California Storm Water Best Management Practice Handbook, Construction Activity, into the construction phase of the project. Prior to construction, temporary measures must be implemented to prevent transport of Pollutants of Concern from the construction site to the storm drainage system. The BMPs shall apply to both the actual work areas and contractor staging areas. Selection of construction-related BMPs would be in accordance with the requirements of the City of Long Beach Storm Water Program,			X	X					Memorial		Statewide Health Planning and	Quality Control	Water Prevention Pollution Prevention Plans, California Storm Water Best Management Practices Handbook, City of Long Beach Storm Water Program Development Best Management Practices	(Signature and Date of Monitoring Agency
areas. Selection of construction-related BMPs would be in accordance with the requirements of the City of Long Beach Storm Water Program, Development Best Management Practices Handbook.	The City of Long Beach Department of Public Works shall require the construction contractor to avoid erosion, transport of pollutants, and siltation during construction of the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, the Todd Cancer Institute Phases I and II, the roadway realignment, and the parking areas. Prior to final grading plans, the City of Long Beach Department of Public Works shall ensure that the plans and specifications require the construction contractor to comply with the revised General Construction Activity Storm Water Permit. Such compliance measures would, at a minimum, include the preparation of a Notice of Intent and the implementation of a Local Storm Water Pollution Prevention Plan (SWPPP) and a Wet Season Erosion Control Plan (for work between October 15 and April 15). These plans shall incorporate all applicable best management practices (BMPs), as described in the California Storm Water Best Management Practice Handbook, Construction Activity, into the construction phase of the project. Prior to construction, temporary measures must be implemented to prevent transport of Pollutants of Concern from the construction site to the storm drainage system. The BMPs shall apply to both the actual work areas and contractor staging areas. Selection of construction-related BMPs would be in accordance with the requirements of the City of Long Beach Storm Water Program,	X	X			X	X	X	х	Memorial		Statewide Health Planning and	Quality Control	Water Prevention Pollution Prevention Plans, California Storm Water Best Management Practices Handbook, City of Long Beach Storm Water Program Development Best Management Practices	(Signature and Date of Monitoring Agency

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Hydro-3									Tarty					
The Office of Statewide Health Planning and Development shall review the final grading plans for the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building to ensure that the plans and specifications require the construction contractor to prepare a Standard Urban Storm Water Management Plan (SUSMP) for construction activities and to implement best management practices (BMPs) for construction, materials, and waste-handling activities, which include the following:			X	X					Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Regional Water Quality Control Board	Standard Urban Storm Water Management Plan	(Signature and Date of Monitoring Agency
 Schedule excavation, grading, and paving activities for dry weather periods. Control the amount of runoff crossing the construction site by means of berms and drainage ditches to divert water flow around the site. Identify potential pollution sources from materials and wastes that will be used, stored, or disposed of on the job site. Inform contractors and subcontractors about the clean storm water requirements and enforce their responsibilities in pollution prevention. The construction contractor shall incorporate SUSMP requirements and BMPs to mitigate storm water runoff that include, but are not limited to, the following:						5								
 The incorporation of bioretention facilities located within the project area The incorporation of catch basin filtration systems The use of porous pavements to reduce runoff volume 														
Hydro-4													-	
The City of Long Beach Department of Public Works shall review the final grading plans prior to grading for the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, the Todd Cancer Institute Phases I and II, the roadway realignment, and the parking areas to ensure that the plans and specifications require the construction contractor to prepare a Standard Urban Storm Water Management Plan (SUSMP) for construction activities and to implement best management practices (BMPs) for construction, materials, and waste-handling activities, which include the following: Schedule excavation, grading, and paving activities for dry weather periods. Control the amount of runoff crossing the construction site by means of berms and drainage ditches to divert water flow around the site.	X	X			X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Regional Water Quality Control Board	Standard Urban Storm Water Management Plan	(Signature and Date of Monitoring Agency

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on the job site. Inform contractors and subcontractors about the clean storm water requirements and enforce their responsibilities in pollution prevention.														
The construction contractor shall incorporate SUSMP requirements and BMPs to mitigate storm water runoff that include, but are not limited to, the following:														
 The incorporation of bioretention facilities located within the project area The incorporation of catch basin filtration systems The use of porous pavements to reduce runoff volume 														
Hydro-5														
The Office of Statewide Health Planning and Development (OSHPD) shall require the construction contractor to undertake daily street sweeping and trash removal throughout the construction of the Miller Children's Hospital pediatric inpatient tower Phases I and II, utility trench, and central plant building. The purpose of the street sweeping and trash removal shall be to avoid degradation of water quality. Prior to the completion of final plans and specifications, the OSHPD shall review the plans and specifications to ensure that the construction documents include a requirement that the construction contractor provide daily street sweeping and trash removal to prevent degradation of water quality.			X	X					Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	Regional Water Quality Control Board	Project plans and specifications	(Signature and Date of Monitoring Agency
Hydro-6														
The City of Long Beach Department of Public Works shall require the construction contractor to undertake daily street sweeping and trash removal throughout the construction of the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, the Todd Cancer Institute Phases I and II, the roadway realignment, and the parking areas. The purpose of the street sweeping and trash removal shall be to avoid degradation of water quality. Prior to the completion of final plans and specifications, the City of Long Beach Department of Public Works shall review the plans and specifications for the project to ensure that the construction documents include a requirement that the construction contractor provide daily street sweeping and trash removal to prevent degradation of water quality.	X	X		X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Public	Regional Water Quality Control Board	Project plans and specifications	(Signature and Date of Monitoring Agency
Hydro-7														
The City of Long Beach shall identify potential impacts to hydrology and water quality related to the construction of the project. Degradation of water quality during construction of the project shall be reduced to below the level of significance through the requirement to conduct a detailed hydrology study based on the final site plans and to implement the recommendations, or comparable measures, into the plans and	Х	Х	X		X	X	Х	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Public	Regional Water Quality Control Board	Project plans and specifications	(Signature and Date of Monitoring Agency

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specifications for each project element prior to final approval by the City of Long Beach Department of Public Works. The hydrology study shall be prepared by a certified civil engineer, and a draft report, including recommendations, shall be submitted to the City of Long Beach Department of Public Works for review. The City of Long Beach Department of Public Works shall provide comments, if any, within 14 days of receiving the draft hydrology study. Monitoring and enforcement shall be the responsibility of the City of Long Beach Department of Public Works.									Tury					
Hydro-8														
If perched groundwater that requires dewatering is encountered during construction of the Miller Children's Hospital (MCH) pediatric inpatient tower, MCH pediatric outpatient tower, MCH link building, or central plant building, the California Regional Water Quality Control Board, Los Angeles Region (RWQCB) shall require the construction contractor to comply with general waste discharge requirements and national pollutant discharge elimination system (NPDES) permit requirements. If analytical results from the perched groundwater indicate that pollutants are present at levels above the NPDES thresholds, then treatment and proper disposal, under approval and oversight by the RWQCB, shall be conducted prior to discharge of groundwater to surface waters.			X						Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Public	Regional Water Quality Control Board	Project plans and specifications	(Signature and Date of Monitoring Agency
NPDES		- 20		,	1 3					E Japan		8 111 15		
The City of Long Beach Planning and Building Department shall require the construction contractor to implement best management practices (BMPs) consistent with National Pollution Discharge Elimination System (NPDES) Permit No. CAS 004003 to reduce transport of Pollutants of Concern from the construction site to the storm drainage and waterway system for each construction element of the project: Miller Children's Hospital (MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench; the MCH pediatric outpatient building; the MCH link building; the Todd Cancer Institute Phases I and II; the roadway alignment; and the parking areas. Prior to completion of final plans and specifications for each construction element of the project, the City of Long Beach Planning and Building Department shall ensure that the plans and specifications require compliance with NPDES Permit No. CAS 004003. The construction contractor for each element of the project shall be required to submit a Standard Urban Storm Water Management Plan to the City of Long Beach for review and approval at least 30 days prior to the anticipated need for a grading permit. The City of Long Beach Planning and Building Department shall monitor construction to ensure compliance with NPDES Permit No. CAS 004003. The Office of Statewide Health Planning and Development has jurisdiction over inpatient facilities, and the City of Long Beach would have jurisdiction over outpatient facilities.	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	City of Long Beach Planning and Building Department	National Pollution Discharge Elimination System Permit, Standard Urban Storm Water Management Plan	(Signature and Date of Monitoring Agency

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and Use		-11												
and Use-1														
The analysis undertaken for this document determined that the project would not result in significant impacts related to land use and planning. Therefore, no mitigation measure would be required.														(Signature and Date of Monitoring Agency
Voise							-							
Voise-1				T	T T									
The City of Long Beach shall minimize the potential for construction noise levels to exceed the City of Long Beach Noise Ordinance by equiring the construction contractor to properly maintain all heavy equipment used for construction of each element of the project: the Todd Cancer Institute Phases I and II; the Miller Children's Hospital MCH) pediatric inpatient tower Phases I and II, central plant building, and utility trench; the MCH pediatric outpatient building; the MCH link building; the road realignment; and the parking areas. Prior to the completion of final plans and specifications, the City of Long Beach shall ensure that the plans and specifications include a requirement that all construction equipment shall be properly maintained. All vehicles and compressors shall utilize exhaust mufflers. Engine enclosure covers as designed by the manufacturer shall be in place at all times. The City of Long Beach shall monitor the use of heavy equipment during construction to ensure conformance with the requirements of properly	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	California Department of Health Services, Office of Noise Control	City of Long Beach Department of Planning and Building	Project plans and specifications	(Signature and Date of Monitoring Agency
he City of Long Beach shall minimize the potential for construction roise levels to conflict with the City of Long Beach Noise Ordinance by equiring the plans and specifications to specify restricted periods for rading and construction for each element of the project: the Todd	X	X	X	X	X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	California Department of Health Services, Office of Noise	City of Long Beach Department of Planning and	Project plans and specifications including daily construction schedules	(Signature and Date of Monitoring Agency
Cancer Institute Phases I and II; the Miller Children's Hospital (MCH) bediatric inpatient tower Phases I and II, central plant building, and utility trench; the MCH pediatric outpatient building; the MCH link building; the road realignment; and the parking areas. Prior to the completion of final plans and specifications, the City of Long Beach hall ensure that the plans and specifications include a provision that estricts grading and construction activities to daily operation from 7:00 i.m. to 7:00 p.m., Monday through Friday, and from 8:00 a.m. to 5:00 b.m. on Saturdays. There should be no work on Sundays or federal holidays.											Control	Building		
Noise-3														
The City of Long Beach shall require that the plans and specifications for the Miller Children's Hospital pediatric inpatient tower and the central plant building require that construction equipment shall be equipped with state-of-the-art noise-muffling devices. Barriers or curtains shall be required to be installed close to equipment to shield the equipment from the receiver. The height and length of the barriers			X	X					Long Beach Memorial Medical Center	Preconstruction/ Construction	California Department of Health Services, Office of Noise Control	City of Long Beach Department of Planning and Building	Project plans and specifications	(Signature and Date of Monitoring Agency

	H		Affect	ed Elen	nent of	Project			Responsible	Monitoring	Enforcement	Monitoring	Docum	nentation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
or curtains shall be determined based on location of construction activity and receiver. Because of the close proximity of the source and receiver, the impact would be dependent on the location of the noise sources. Prior to the start of construction, the contractor shall develop a noise control plan based on actual equipment to be used and location of various activities. If actual equipment noise levels are not available, equipment noise levels shall be measured in the field. The plan should predict the noise levels with the actual equipment and with the barriers or curtains in place. The plan shall take into consideration the order of construction and equipment mix. Equipment mix and/or the number of equipment operating shall be considered in reducing the noise levels.														
Public Services	9			ingsen	T. R. J.									
Public Services-1														
The City of Long Beach shall ensure that the exposure of people or property to security-related issues from the operation of the Miller Children's Hospital pediatric inpatient tower Phases I and II, central plant building, pediatric outpatient building, and link building; the Todd Cancer Institute (TCI) Phases I and II; and all new parking facilities within the Long Beach Memorial Medical Center (LBMMC) campus be minimized through an amendment of the existing security plan prior to the operation of each project element. The LBMMC shall submit to the City of Long Beach an amendment to the security plan that identifies the existing measures that shall be applied to each element of the project at least 30 days prior to the anticipated need for an occupancy permit.	X	Х	X	X	X	X	X	Х	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	City of Long Beach Department of Planning and Building	Amendment to the security plan	(Signature and Date of Monitoring Agency
Public Services-2														
The City of Long Beach shall ensure that the exposure of property to vandalism and of people to safety hazards from the operation of the Miller Children's Hospital pediatric inpatient tower Phases I and II, central plant building, pediatric outpatient building, and link building; the Todd Cancer Institute (TCI) Phases I and II; and all new parking facilities within the Long Beach Memorial Medical Center (LBMMC) campus shall be minimized through an amendment to the existing lighting plan prior to the operation of each project element. The LBMMC shall submit to the City of Long Beach an amendment to the lighting plan that documents the location of all exterior lighting on structures, within parking areas, and along pedestrian and vehicular routes of travel. The amended lighting plan shall be submitted to the City of Long Beach at least 30 days prior to the anticipated need for an occupancy permit.	X	X	X	X	X	X		X	Long Beach Memorial Medical Center	Preconstruction/ Construction	Office of Statewide Health Planning and Development	City of Long Beach Department of Planning and Building	Amendment to the lighting plan	(Signature and Date of Monitoring Agency
Traffic and Transportation		-												
Transportation-1														
The City of Long Beach shall ensure that the following improvements are identified as potential recommendation measures to mitigate significantly impacted intersections. The project can be expected to pay			X						Long Beach Memorial Medical Center	Preconstruction/ Operation	City of Long Beach Traffic and Transportation	City of Long Beach Traffic and Transportation	California Department of Transportation Encroachment Permit,	(Signature and Date of Monitoring

Septili		3.4	Affec	ted Elen	nent of	Project	1 9		Responsible	Monitoring	Enforcement	Monitoring	Docum	entation of Compliance
	Mitigation Measure	A B	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
a fair s measur 1)	Atlantic Avenue/Spring Street Modify existing median and restripe Spring Street to provide a second eastbound (EB) left-turn lane and a										Bureau	Bureau	Southern California Association of Governments Regional Transportation Plan, the Transportation	Agency
	second westbound (WB) left-turn lane.Modify the traffic signal as needed.									1			Element of the City of Long Beach General Plan, and the Long Beach Memorial	9
)	Atlantic Avenue/East 29th Street Restrict EB left-turn movements from 29th Street to northbound (NB) Atlantic Avenue.												Medical Center Parking Plan	
5)	Atlantic Avenue/East 27th Street Restrict EB left-turn movements from 27th Street to NB Atlantic Avenue.													
7)	Atlantic Avenue/Willow Street No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.													
)	Long Beach Boulevard/Willow Street No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.												-	
3)	 Long Beach Boulevard/Spring Street Widen and/or restripe to provide an exclusive NB and southbound (SB) right-turn lane. Modify the traffic signal, as needed. 													
1)	Long Beach Boulevard/Wardlow Road No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way.													
2)	Long Beach Boulevard/I-405 NB Ramps Install a traffic signal.													
3)	 I-405 SB Ramps/Crest Drive Restripe to provide an exclusive WB right-turn lane. 													
9)	 Pasadena Avenue/Spring Street Widen and/or restripe to provide an exclusive NB left-turn lane and an EB right-turn lane. Install a traffic signal. 													
ransp	portation-2													
are ide	ity of Long Beach shall ensure that the following improvements entified as potential as potential recommendation measures to te significantly impacted intersections. The project can be	X							Long Beach Memorial Medical Center	Preconstruction/ Operation	City of Long Beach Traffic and Transportation	City of Long Beach Traffic and Transportation	California Department of Transportation Encroachment Permit,	(Signature and Date of Monitoring

	34	1164	Affect	ed Elen	nent of	f Projec	t	45.5	Responsible	Monitoring	Enforcement	Monitoring	Docum	nentation of Compliance
Mitigation Measure	Α	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
expected to pay a fair share of the construction costs to implement these mitigation measures. 1) Atlantic Avenue/Spring Street • Widen and/or restripe to provide an exclusive northbound (NB) and southbound (SB) right-turn lane. • Widen and/or restripe to provide a second eastbound (EB) and westbound (WB) left-turn lane. • Modify the traffic signal, as needed.											Bureau	Bureau	Southern California Association of Governments Regional Transportation Plan, the Transportation Element of the City of Long Beach General Plan, and the Long Beach Memorial Medical Center Parking Plan	Agency
 Atlantic Avenue/Willow Street No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way. 													r a King r ian	Ř
9) Long Beach Boulevard/Willow Street No physical mitigation measure is feasible; any additional turn lanes would require widening and														
additional right-of-way. 13) Long Beach Boulevard/Spring Street • Widen and/or restripe to provide an exclusive NB, SB, and EB right-turn lane. • Widen and/or restripe to provide a second EB through lane. • Modify the traffic signal, as needed.														
 Long Beach Boulevard/Wardlow Road No physical mitigation measure is feasible; any additional turn lanes would require widening and additional right-of-way. 														
Impacts would be mitigated through the specified scenario or other comparable scenarios that adhere to the same performance standards.														
Transportation-3														
Construction and operation impacts to parking for each element of the project shall be mitigated through the implementation of a parking program or comparable measure that provides sufficient long-term parking to meet City of Long Beach (City) code requirements. Long Beach Memorial Medical Center (LBMMC) shall keep the City informed of any modifications to the parking program for the project. Construction parking plans shall be submitted to the City at least 30 days prior to the anticipated issuance of a grading permit for each element of the project. Operation parking plans shall be submitted to the City at least 30 days prior to the anticipated issuance of occupancy permits or operation of the specified element of the project.														

Long Beach Memorial Medical Center Expansion
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			1	_	_	Project		1 8	Responsible	Monitoring	Enforcement	Monitoring	Docum	entation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
Roadway Realignment												F.1		
Construction Miller Children's Hospital (MCH) shall submit a construction parking							x		Long Beach Memorial Medica! Center	Preconstruction	City of Long Beach Traffic and Transportation Bureau	City of Long Beach Traffic and Transportation Bureau	California Department of Transportation Encroachment Permit, Southern California	
plan to address the 200 parking spaces that are expected to be removed							^				Darcad	Darcad	Association of	
from Parking Lot K as a result of the construction of the roadway													Governments	
realignment element of the project. The parking analysis identified the availability of 259 excess parking spaces available within the Long Beach Memorial Medical Center campus (Campus). It is anticipated that the loss of the 200 parking spaces shall be offset through the use of 200	-												Regional Transportation Plan, the Transportation Element of the City of	(Signature and Date of Monitoring Agency
of the existing available 259 parking spaces. LBMMC will dedicate an increased number of parking spaces in Parking Lot A to visitors to compensate for parking spaces removed from Parking Lot K.													Long Beach General Plan, and the Long Beach Memorial	
Operation					E		X						Medical Center Parking Plan	
MCH shall submit an operation parking plan to address the permanent need for 200 parking spaces to replace parking spaces that are expected							^						L.	
o be removed from Parking Lot K as a result of the roadway ealignment element of the project. The parking analysis identified the													4	(Signature and Date of Monitoring Agency
availability of 259 excess parking spaces available within the Campus. During construction, it is anticipated that the permanent loss of the 200													5%	
parking spaces shall be offset through the use of 200 of the existing available 259 parking spaces.											Giv. (1			
MCH–Pediatric Inpatient Tower Phase I, Utility Trench, and Central									Long Beach Memorial	Preconstruction	City of Long Beach Traffic and	City of Long Beach Traffic and	California Department of Transportation	
Plant Building									Medical Center		Transportation Bureau	Transportation Bureau	Encroachment Permit, Southern California	
Construction													Association of Governments	
MCH shall submit a construction parking plan to address the 86 parking spaces that are expected to be removed from the demolition of Parking			X						20				Regional Transportation Plan,	
ot F for the construction of this element of the project. The parking												21	the Transportation Element of the City of	
analysis identified the availability of 259 excess parking spaces available within the Campus. It is anticipated that the loss of the 86													Long Beach General Plan, and the Long	(Signature and Date of Monitoring Agency
parking spaces shall be offset through the use of 59 of the existing available 259 parking spaces, and the remaining 27 spaces shall be												55	Beach Memorial Medical Center	
offset through the use of 27 of the 121 available spaces in Parking Lot N.													Parking Plan	
<u>Operation</u>														
MCH shall submit an operation parking plan to address the permanent need for 240 additional parking spaces (86 from demolition of Parking			X											6
Lot F, 144 for operation of Phase I of the MCH, and 10 for operation of the central plant building). The parking analysis identified the														
availability of 259 excess parking spaces available within the Campus. It is anticipated that the permanent loss of the 240 parking spaces shall be offset through the use of 59 existing available parking spaces, Parking Lot N (121 spaces), and lease of off-site parking spaces in														(Signature and Date of Monitoring Agency

			Affected	d Elem	ent of	Project		100	Responsible	Monitoring	Enforcement	Monitoring	Docum	entation of Compliance
Mitigation Measure	A	В	C	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
Parking Lot L (60 spaces).														
MCH–Pediatric Outpatient Building									Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Traffic and Transportation	City of Long Beach Traffic and Transportation	California Department of Transportation Encroachment Permit,	
<u>ionstruction</u>											Bureau	Bureau	Southern California Association of	*
ot required.													Governments Regional	
peration													Transportation Plan, the Transportation	
CH shall submit an operation parking plan to address the permanent ed for 400 additional parking spaces for the operation of the MCH					Х								Element of the City of Long Beach General	
ediatric outpatient building. It is anticipated that the permanent need													Plan, and the Long Beach Memorial	(Signature and Date of Monitoring
or 400 parking spaces shall be offset through the use of 71 spaces in arking Lot Q, 96 spaces in Parking Lot R, 72 spaces in Parking Lot S, 7 spaces in Parking Lot T, and 74 spaces provided by development of 1,174-space parking structure within the existing footprint of Parking bot K, which would also accommodate the 41 parking spaces removed as a result of construction of the parking structure itself.													Medical Center Parking Plan	Agency
1CH-Link Building									Long Beach	Preconstruction	City of Long	City of Long	California Department	
									Memorial Medical Center		Beach Traffic and Transportation	Beach Traffic and Transportation	of Transportation Encroachment Permit,	
onstruction									Medical Center		Bureau	Bureau	Southern California	
ot required.													Association of Governments	
<u>Operation</u>													Regional Transportation Plan, the Transportation	
ACH shall submit an operation parking plan to address the 50 parking paces to support operation of the MCH link building. It is anticipated						X							Element of the City of Long Beach General	
nat the 50 parking spaces required to support the operation of the ACH link building shall be provided in the 1,174-space parking													Plan, and the Long Beach Memorial	(Signature and Date of Monitoring
ructure to be constructed within the existing footprint of Parking Lot													Medical Center	Agency
													Parking Plan	
ICH-Pediatric Inpatient Tower Phase II									Long Beach	Preconstruction	City of Long	City of Long	California Department	
onstruction									Memorial Medical Center		Transportation	Beach Traffic and Transportation	Encroachment Permit,	
ot required.											Bureau	Bureau	Southern California Association of	
peration													Governments Regional	
ICH shall submit an operation parking plan to address the 184 parking											>=		Transportation Plan, the Transportation	
paces required to support the operation of the MCH pediatric inpatient ower Phase II. It is anticipated that the 184 parking spaces, required to				X					α.				Element of the City of Long Beach General	(Signature and Date of Monitoring
perate the MCH pediatric inpatient tower Phase II, shall be provided									8 1				Plan, and the Long	Agency
the 1,174-space parking structure to be constructed within the xisting footprint of Parking Lot K.													Beach Memorial Medical Center	
tioning to out in the court.													Parking Plan	

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			Affecte	ed Elen	nent of	Projec	t		Responsible	Monitoring	Enforcement	Monitoring	Docum	entation of Compliance
Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
and Cancer Institute Phase I Construction MMC shall submit a construction parking plan to address the 25 rking spaces that are expected to be removed from Parking Lot Accluding 104 spaces permanently removed by the footprint of the filding and additional 149 parking spaces to be temporarily removed.	,				-				Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Traffic and Transportation Bureau	City of Long Beach Traffic and Transportation Bureau	California Department of Transportation Encroachment Permit, Southern California Association of Governments Regional Transportation Plan,	
a result of construction staging. It is anticipated that the loss of th 3 parking spaces shall be offset through the lease of 253 off-sit rking spaces at Parking Lot L.	9												the Transportation Element of the City of Long Beach General Plan, and the Long Beach Memorial Medical Center	(Signature and Date of Monitoring Agency
MMC shall submit an operation parking plan to address the rmanent need for 522 additional parking spaces (replace 104 spaces as a result of construction and provide 418 spaces for the operation Todd Cancer Institute Phase I). It is anticipated that the need for 52 rking spaces shall be offset through the use of 236 spaces to be	s n 2												Parking Plan	
ased off site at Parking Lot L, 238 spaces to be leased off site a rking Lot M, and 48 spaces to be provided through development orking Lot P on site.	t													(Signature and Date of Monitoring Agency
onstruction	1								Long Beach Memorial Medical Center	Preconstruction	City of Long Beach Traffic and Transportation Bureau	City of Long Beach Traffic and Transportation Bureau	California Department of Transportation Encroachment Permit, Southern California	
MMC shall submit a construction parking plan to address the 21 rking spaces that would be lost to construction (79 parking space d construction staging (132 parking spaces). It is anticipated that the so of the 211 parking spaces shall be offset through the provision of 1 parking spaces in a 1,174-space parking structure to be developed thin the existing footprint of Parking Lot K.	e f	X							2 1				Association of Governments Regional Transportation Plan, the Transportation Element of the City of Long Beach General	(Signature and Date of Monitoring Agency
peration SMMC shall submit a construction parking plan to address the 29 rking spaces that would be lost to construction (79 parking space	;)	x							i				Plan, and the Long Beach Memorial Medical Center Parking Plan	
d operation of the Todd Cancer Institute Phase II (212 parkin aces). It is anticipated that the loss of the 291 parking spaces shall be fiset the provision of 291 parking spaces in the 1,174-space parkin fucture to be developed within the existing footprint of Parking Lot K	g e g													(Signature and Date of Monitoring Agency

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Mitigation Measure	A	В	C	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
Itilities and Service Systems		W.			120			11				1 a 48 k F		
Utilities-1														
The City of Long Beach Shall divert at least 50 percent of the construction solid waste generated to ensure compliance with applicable federal, state, and local statutes related to solid waste and educe direct and cumulative impacts from construction to below the evel of significance. Prior to advertising for construction bids for the Ailler Children's Hospital (MCH) pediatric inpatient tower Phases I and I, central plant building, and utility trench, the Office of Statewide Health Planning and Development (OSHPD) shall ensure that the plans and specifications include the requirement for the construction contractor to comply with the Solid Waste Management Act of 1989. To ensure conformance with the Solid Waste Management Act of 1989, the OSHPD shall require the construction contractor to manage the solid waste generated during construction of each element of the project by diverting at least 50 percent of it from disposal in landfills, particularly Class III landfills, through source reduction, reuse, and ecycling of construction and demolition debris. The construction contractor shall submit a construction solid waste management plan to the OSHPD for approval prior to initiation of demolition activities for the MCH pediatric inpatient tower Phase I, central plant building, and utility trench. The construction contractor shall demonstrate compliance with the solid waste management plan through the			X	X					Long Beach Memorial Medical Center	Preconstruction/ Construction/ Operation	Office of Statewide Health Planning and Development	Office of Statewide Health Planning and Development, Facilities Development Division	Construction Solid Waste Management Plan	(Signature and Date of Monitoring Agency
ubmission of monthly reports during demolition activities that estimate otal solid waste generated and diversion of 50 percent of the solid vaste. The City of Long Beach shall divert at least 50 percent of the construction solid waste to ensure compliance with applicable federal, tate, and local statutes related to solid waste and reduce direct and cumulative impacts from construction to below the level of cignificance. Prior to advertising for construction bids for the Todd Cancer Institute (TCI) Phases I and II, the Miller Children's Hospital MCH) pediatric outpatient building, the MCH link building, the oadway realignment, and the parking facilities, the City of Long Beach shall ensure that the plans and specifications include the requirement for the construction contractor to comply with the Solid Waste Management Act of 1989. To ensure conformance with the Solid Waste Management Act of 1989, the City of Long Beach shall require the construction contractor to manage the solid waste generated during construction of each element of the project by diverting at least 50 percent of it from disposal in landfills, particularly Class III landfills, hrough source reduction, reuse, and recycling of construction and	X	Х			X	X	X	X	Long Beach Memorial Medical Center	Preconstruction/ Construction	City of Long Beach Department of Public Works	City of Long Beach Department of Public Works	Construction Solid Waste Management Plan	(Signature and Date of Monitoring Agency
demolition debris. The construction contractor shall submit a construction solid waste management plan to the City of Long Beach or approval prior to initiation of demolition activities for the TCI Phases and II, the MCH pediatric outpatient building, the MCH link building, he roadway realignment, and the parking facilities. The construction														:e

	- 33,	11.7	Affect	ed Elen	nent of	Projec		CEL SI	Responsible	Monitoring	Enforcement	Monitoring	Docum	nentation of Compliance
Mitigation Measure	A	В	C	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
contractor shall demonstrate compliance with the solid waste management plan through the submission of monthly reports during demolition activities that estimate total solid waste generated and diversion of 50 percent of the solid waste.									Tarty					
Utilities-3									11.00					
The Office of Statewide Health Planning and Development (OSHPD)			X	X					Long Beach	Preconstruction/	Office of	Office of	Construction Solid	
shall review the plans and specifications for the Miller Children's Hospital pediatric inpatient tower Phases I and II and central plant building to ensure that the existing Long Beach Memorial Medical Center service area has adequate trash and recycling receptacles for compliance with applicable federal, state, and local statutes related to solid waste and to reduce direct and cumulative impacts from project operation and maintenance to below the level of significance. Such compliance may be partially attained through the provision of a service area for the central plant building. Prior to advertising for construction bids for each new building, the OSHPD shall ensure that the plans and specifications designating locations for trash receptacles and recycling receptacles are in conformance with the California Solid Waste Reuse and Recycling Access Act of 1991. Wherever trash receptacles are provided throughout the project site, a recycling receptacle for plastic, aluminum, and metal shall also be provided. Signs encouraging patrons to recycle shall be posted near each recycling receptacle.									Memorial Medical Center	Operations	Statewide Health Planning and Development	Statewide Health Planning and Development	Waste Management Plan	(Signature and Date of Monitoring Agency
Utilities-4														
The City of Long Beach shall review the plans and specifications for the Todd Cancer Institute Phases I and II, the Miller Children's Hospital (MCH) pediatric outpatient building, the MCH link building, and the parking facilities to ensure that adequate service areas are provided for trash and recycling receptacles for compliance with applicable federal, state, and local statutes related to solid waste and to reduce direct and cumulative impacts from project operation and maintenance to below the level of significance. Prior to advertising for construction bids for each new building, the City of Long Beach shall ensure that the plans and specifications designating locations for trash receptacles and recycling receptacles are in conformance with the California Solid Waste Reuse and Recycling Access Act of 1991. Wherever trash receptacles are provided through the project site, a recycling receptacle for plastic, aluminum, and metal shall also be provided. Signs encouraging patrons to recycle shall be posted near each recycling receptacle.			X	X	X	X		X	Long Beach Memorial Medical Center	Preconstruction/ Operations	City of Long Beach Department of Planning and Building	City of Long Beach Department of Planning and Building	Construction Solid Waste Management Plan	(Signature and Date of Monitoring Agency
Utilities-5														
To meet both the City of Long Beach and the Long Beach Memorial Medical Center (LBMMC) intention to protect the 54-inch-diameter storm drain below portions of the LBMMC campus expansion area, due to potential effects of the existing pipe leaking discharge into ground, or existing groundwater leaking into the existing storm drain, the City of Long Beach shall install a plastic lining within the 54-inch reinforced-			X	X	X	X			Long Beach Memorial Medical Center	Preconstruction/ Operations	City of Long Beach Water Department Maintenance Department	City of Long Beach Water Department Maintenance Department	City of Long Beach Water Department Storm Drain Systems Monitoring Plan	Signature and Date of Monitoring Agency

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Mitigation Measure	A	В	С	D	E	F	G	Н	Implementation Party	Period	Agency	Agency	Source	Signature and Date
concrete piping (RCP) beneath the Miller Children's Hospital (MCH) of the current LBMMC expansion area. Much of the length of the existing 54-inch storm drain pipe under the LBMMC campus has been replaced with 54-inch double-gasketed RCP. The Long Beach Water Department's Maintenance Department inspection of all sections of the RCP piping was found to be operational, intact, and in good visual condition. Therefore, lining the portions of the 54-inch RCP that are outside the limits of the LBMMC expansion area of the MCH should not be needed. However, it is still the LBMMC's intention to protect the 54-inch RCP storm drain beneath the MCH. To accomplish this, the City of long Beach shall process an easement for the storm drain because one does not currently exist. Two strategies shall be implemented: 1. The interior of the drain line that lies beneath the MCH shall be retrofitted with a polyvinyl chloride (PVC) liner. 2. A protective structural concrete slab bridge shall be constructed above the drain with a Styrofoam cushioning layer. This shall serve to protect the pipe from any excessive loads from the building above.														

KEY:

- A. TCI Phase I
- B. TCI Phase II
- C. MCH Phase I pediatric inpatient tower, central plant, and utility trench
 D. MCH Phase II pediatric inpatient tower
 E. MCH pediatric outpatient building
 F. MCH link building
 G. Roadway Realignment
 H. Parking Program